Training Material on Competitiveness and Development

Outline

Context

If you were to use the Internet search engine Google to find an answer to the question "what is competitiveness?" you would get among the results terms like export competitiveness, competitiveness of SMEs, economic competitiveness, regional competitiveness, responsible competitiveness or green competitiveness... Malta even has a Ministry for Competitiveness and Communication, there are competitiveness scorecards, institutes and yearbooks. Competitiveness has become a term that can be associated with almost everything - leadership, growth, development, success, prosperity or productivity. But what does competitiveness really mean? Why has competitiveness become such a key term in economics and business? Why does it seem to be the main goal - on company and industry level, but also for countries and regions in the world?

With increased globalisation and liberalization of trade and capital movements, companies and countries are more than ever exposed to global competition - a firm does not any more compete only with others within the national boundaries, but it is confronted with companies from virtually any other country. In such an environment, it seems to be fundamental for both companies and nations to be able to compete at an international level. Competitiveness is therefore regarded as a crucial prerequisite of success, and expected to bring about economic growth, sustained development and increase in the standard of living of populations. By the same token, there are concerns about the links between competitiveness and economic prosperity and the level of poverty, in particular of developing countries.

1. Purpose of the training material

The UNCTAD Virtual Institute materials on Competitiveness and Development are designed to support university professors in "unpacking" the idea of "competitiveness", to enable their students to identify situations of misuse of the concept and to think about the following questions:

How did the notion of competitiveness evolve over the time and why has it become so important particularly now? Can we talk about national competitiveness or is competitiveness predominantly a microeconomic issue? Can we measure competitiveness and which indicators have been used until now? Is competitiveness a pure economic concept or is it necessary to integrate political and social aspects? What are economic, social, political or other consequences of high or low level of competitiveness? Can governments, private companies or other actors do something to improve it? How are development and competitiveness interlinked? Does competitiveness aim to enhance development? What has to be considered within a national competitiveness strategy in order to integrate development into the formulation of policies?
This training material is not primarily conceived as a complete course but rather to provide as a set of stimulating resources and activities that could be used either independently or integrated into existing courses offered at the university level.

The materials should enable university teachers:

- To extend their coverage of this subject area
- To integrate the issue of competitiveness into their existing courses
- To provide their students (potential future policy makers and entrepreneurs) with both theoretical and practical knowledge on competitiveness

**Target audience**

The target audience of the training material on Competitiveness and Development is twofold: Firstly university teachers who are interested in teaching competitiveness. Secondly, their graduate students enrolled in programmes such as International Trade, Economic Policy, International Economics, Development Studies or Regional Economics. The modular character of the training material may facilitate the use of individual modules, case studies, provided data and examples in other programmes (also undergraduate).

The focus will be on policy aspects, the teaching material will therefore be accessible to students without a strong econometric background. Basic mathematic knowledge might be needed for the Module dealing with different approaches to measuring competitiveness.

**Methodology:**

- The training material on competitiveness is most suitable for a seminar with max. 25 participants. A relatively small group of students with similar interests will facilitate the practical work on case studies and projects.
- The training material will consist of 4 modules (see outline below). As far as possible, the structure will allow for flexible and independent use.
- The material will contain some case studies and data on different countries, regions and sectors. However, it would need to be further adapted by individual universities to reflect specific local needs and interests.
- A simulation (“interactive role-play”) is also included in the material so that students can apply, test and increase their knowledge and skills. (See separate document)
- The training material will include: (a) course outline; (b) a handbook with an annotated list of key readings and a more comprehensive list of related documents; (c) an activity book including e.g. team work assignments, case studies with assignments, proposals for debates and essays, data, questions for discussion and/or to test the understanding after every section; (d) a scheme of work with learning objectives additional comments on when and how to use activities; (e) material for the simulation, both for lecturers and students.

**General Learning Objectives**

**a) Knowledge, understanding and academic skills:**

The material should enable the students to:
• Recognise the complexity and the elusiveness of "competitiveness", trace the historical evolution of the concept of competitiveness and be able to describe and critically analyse the concept.

• Examine the links between the concepts of competitiveness and development/welfare of a country.

• Identify and analyse economic, political and social determinants of competitiveness and be aware of their interdependencies.

• Analyse critically different quantitative and qualitative approaches regarding the creation and measurement of competitiveness.

• Examine the impact of policies and the wider environment on the meta-, macro-, meso- and micro levels on the competitiveness of a region, a country or specific sectors.

Apply their knowledge of different models of competitiveness and its measurement to concrete case studies and a hands-on project to both examine the competitiveness of a nation/region and based on the analysis propose competitiveness-enhancing policies (a "competitiveness strategy") (especially in the simulation and the final project).

b) Personal skills and soft skills:
The training material should enable students to develop their skills in writing clearly and concisely for a number of different audiences, including non-specialists. They should improve their oral communication skills by participating in debates and by giving presentations to the rest of the group. Students should also develop their ability to work in teams.
OUTLINE

MODULE 1: Introduction

This module will give a general introduction to the concept of competitiveness. Students will analyse different definitions and examine the historical evolution of the concept. They should deduce main characteristics (levels: world, country, region, company, individual; static versus dynamic; absolute versus relative concept; economic, political, social factors) and become aware of the fact that competitiveness is an extremely multifaceted concept. The introductory module will also give first insights into the analysis of competitiveness from a developmental perspective.

1. What is competitiveness?
   a. Different definitions of and views on competitiveness
   b. The relativity of competitiveness
   c. Summary of the main characteristics and dimensions of competitiveness

2. History of the concept of competitiveness
   a. Thoughts and theories that contributed to the concepts of competitiveness
   b. Why does competitiveness question neoclassic theory?
   c. How did globalisation condition and shape the concepts of competitiveness

3. Competitiveness and Development
   a. Competitiveness in developing countries
   b. Development - a goal of competitiveness? Competitiveness - a way to achieve development?

MODULE 2: Different dimensions of competitiveness of nations

This module introduces the students to different theoretic models and their respective rationale behind the preconditions of competitiveness and the main actors involved in creating and raising a nation's competitiveness. The selected models will familiarize the students with both microeconomic and mainly macroeconomic concepts, qualitative as well as quantitative ones. The section aims at equipping the students with the necessary tools to apply critically the concepts when working on their own project (last module). The emphasis will be placed on the systemic approach, on which module 4 will be based. It will provide space for a critical discussion of the models, with the objective to make students aware of their limitations. The module will finish by giving a brief overview about the conceptions and their background.

1. Overview Porter/World Economic Forum
   • The Microeconomics of Competitiveness
   • The Competitiveness diamond
   • The Dynamics of Competitiveness

2. Other important players in the competitiveness arena
   • The qualitative IMD model of competitiveness
   • The OECD and its work on competitiveness

3. Systemic Competitiveness
   • Conceptual background
   • Overview about determinants on Meta-, Macro-, Meso- and Micro level
- Competitiveness as outcome of a pattern of complex and dynamic interaction between government, firms, intermediary institutions, and the organizational capacity of a society

**MODULE 3: Assessment and measurement of competitiveness**

This module will give an overview of the different possibilities to measure competitiveness and encourage students to critically examine rankings and indicators. The presented indices and rankings can be used in the final project.

1. Macroeconomic and microeconomic indicators:
   - Price and cost competitiveness
   - Real exchange rates
   - Export market shares
   - Trade balances and the export/import ratio

2. Rankings assessing competitiveness at national level
   - The Global Competitiveness Report
   - The World Competitiveness Yearbook
   - The UNIDO Scoreboard
   - Critique of the use of rankings as competitiveness measure

**MODULE 4: Determinants of Competitiveness**

The fourth module will provide an overview about the multitude of determinants of competitiveness on all four levels: Meta, Macro, Meso and Micro. Instead of giving lecture notes in form of text, it consists of a list of determinants and guiding questions that can help in the analysis of different determinants' impact on competitiveness. While on some levels (Macro and Meso) the determinants are mostly of an economic nature, the section will also highlight the importance of political, social, historical and cultural elements, enabling or constraining policies. This module will also draw the attention of the students to the limitations of national policies due to the political and economic integration of countries on a global level.

1. The Metalevel determinants
   - The underlying socio-cultural factors: cultural-economic interactions, the role of trust and social capital
   - Formulation of strategies and policies - commitment and capability of actors
   - Openness, integration and policy space

2. Macrolevel and Meso level
   - Political stability
   - The role of the government, Governance and institutional development
   - Exchange rates, monetary policy and the financial sector
   - The Financial System - Financial Integration and Financial Markets
   - The labour market and the role of Human Capital, Education and Training
   - Innovation and technology
   - Trade patterns and trade policies
   - Foreign Direct Investment and Competitiveness
   - Fiscal policy and Public finance
   - Environment
• Infrastructure

3. Microlevel determinants:
   • Corporate competence and strategies

CONCLUDING MODULE: Simulation and/or Projects (groups of 2-3 students for projects)

The last module will give the students the opportunity to apply and test their knowledge by preparing a project. Possible subjects are briefly summarized below. The project has the objective to make students once again critically think about the concept of competitiveness. When choosing their own approach (can be one of the models and using rankings and indicators presented in Module 3, but not necessarily) students should become aware of the limitations and they should integrate their critique when presenting their results to their fellow students.

1. Project on country-specific competitiveness: example for content and structure
   • Assess current level of competitiveness using one of the measurement approaches (indexes, descriptive etc.)
   • Define the country's competitiveness vision (short/medium/long term goals)
   • Find major weaknesses/bottlenecks
   • Define competitive strengths to be exploited
   • Identify sectors with growth potential
   • Define policy tools in an integrated strategy, give recommendations for the government, meso-level actors, companies taking into consideration the role of international institutions, agreements etc.

2. Students could also choose to their projects on specific enabling factors (determinants), e.g.:
   • ICT/e-Business and competitiveness, Technology/new and dynamic sectors and competitiveness: Discuss and determine the impact of ICT/new and dynamic sectors or a mixture of those on competitiveness. How are other determinants such as the labour market, education or innovation related to ICT/technology as competitiveness determinant? Describe specific case studies.
   • The labour market and competitiveness: possible issues to look at could be changes in the structure, flexibility, but also the role of the informal labour market etc.
   ...

3. Project on sector-specific competitiveness. Porters approach could be a way to look at sector specific competitiveness.

4. Analysis with focus on one of the four levels (meta-, macro-, meso-, micro).
   Students could analyse competitiveness of a country/a region by focusing primarily on one of the four levels. Outline also links to other levels.

5. SME competitiveness. A project could also focus on the role of SMEs as a key element of an economy, especially in a developing country. While competitiveness is spontaneously associated with an international perspective, it might be good necessary to look first at the domestic aspects of SME competitiveness. Examine if - and in this case - how policies aiming at
competitiveness at an international level can be coherent with policies pursuing national development. Ideas for content and structure:

- Importance of SMEs for developing countries economies
- Opportunities and risks for SMEs
- Access to finance and business development services
- Access to technology
- Strengths and limits of business linkages through TNCs and FDI
- International/National policy coherence
### Training Material on Competitiveness and Development

#### Scheme of work

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<thead>
<tr>
<th>Content Outline</th>
<th>Learning Objectives of chapters</th>
<th>Possible teaching activities</th>
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<tr>
<td><strong>In general it is a good idea to present the learning objectives to the students at the beginning of every module and to ask them about their expectations in the very beginning of the seminar</strong></td>
<td>(At the end of that chapter, students should be able to..)</td>
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<td><strong>MODULE 1 Introduction</strong></td>
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<tr>
<td><strong>1. What is competitiveness?</strong></td>
<td>• Understand the different levels to which competitiveness can apply</td>
<td><strong>Activity 1 (Chapter 1.1):</strong> Definition and characteristics of Competitiveness</td>
<td>Make sure that definitions are clear to the students.</td>
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<td>• Discriminate between definitions according to the level of the economy (??) they refer to</td>
<td>Could be done in the very beginning of the course.</td>
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<td>• Explain and critically review key issues of Krugman’s position concerning competitiveness at national level</td>
<td>Aims at involving students and create a learning atmosphere where discussion is fundamental. The activity could help the lecturer to determine the level of knowledge of the students.</td>
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<td>• Describe the main goals of competitiveness according to the respective level</td>
<td>The activity contributes directly to achieving the learning objectives of the module, since it makes students analyse definitions with regard to different levels, find out some of the characteristics and get a feeling for the complexity of the concept.</td>
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<td>• Recognise the complexity and the elusiveness of “competitiveness” and to make first judgements on adequate use of the term</td>
<td>The activity could be split into two parts, leaving the formulation of a possible definition for the end of the chapter.</td>
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<td><strong>Personal skills:</strong> Teamwork, analytical thinking/structuring, …</td>
<td><strong>Activity 2 (Chapter 1.1):</strong> Competitiveness of nations/characteristics</td>
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| | | By asking students for concrete examples regarding static competitive advantages discussed in class, their}
| Content Outline | Learning Objectives of chapters  
(At the end of that chapter, students should be able to..) | Possible teaching activities | Additional Comments |
|-----------------|--------------------------------------------------|---------------------------|---------------------|
| 2. History of the concept of competitiveness | • Review and describe previous concepts and theories relating to competitiveness  
• Compare them with the idea of competitiveness and outline similarities and differences?  
• Explain the reason for differences.  
• Evaluate how globalisation changed the concept of competitiveness  
• **Personal skills:** clear and precise oral presentation in front of the class | **Activity 3 (Chapter 2): History of competitiveness**  
Review could be prepared at home and presented during the following session in class. Depending on available time, number of students and the level of previous knowledge, the review can be given e.g. as a short oral presentation or a written summary. The activity will help students to recall knowledge on economic theories preceding the concept of competitiveness and make them think about the links and differences between those and competitiveness, taking as a starting point for this comparison their present level of knowledge. The activity can lead to the discussion on competitiveness and the neoclassical economic theory. | Depends on the level of knowledge; if most students do not know some of the concepts they might be reviewed in class or presented by the lecturer. |
| 3. Competitiveness and Development | • Get first insights into the meaning of competitiveness in the context of developing countries  
• Discuss briefly under which conditions and how competitiveness can lead to development | **Activity 4 (Chapter 3): Competitiveness in developing countries**  
Brainstorming on what makes developing countries competitive and what could be the constraints on their competitiveness | This question will be discussed in much more detail in the following modules. However, students could link their comments on that question to the different historical concepts and are confronted from the very beginning with the exercise to look at |
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| Discussion, Wrap-up and feedback | • Transfer and apply new knowledge and involve in a critical debate  
• Reinforce learning through review questions and mindmap | **Discussion questions**  
Search for concrete examples and formulate an opinion.  
**Activity 5: First Wrap-up of the Module**  
Visualize learned concepts, but also questions and doubts regarding the concept of (national) competitiveness in form of a MindMap (define - a list of all the concepts grouped according to how they related to each other). Further elements of competitiveness can be added later throughout the course, the first ones might be reviewed.  
**Review questions**  
Review questions can be handed out to the students, so that they can check their understanding by themselves. They can also be used by the professor for tests etc. | competitiveness from a developmental perspective.  
The questions for discussion can be integrated at the end of the module or when the respective part is addressed |
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<td><strong>MODULE 2: Approaches to competitiveness</strong></td>
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| **1. Porter's theory of the competitive advantage of nations** | - Recognise the role of industries in national competitiveness  
- Identify the key features of Porter's theory  
- Describe the economic influences on Porter's theory and the ways in which he also differs from them  
- Recognise how Porter's theory has been influential  
- Identify gaps in the approach | **Activity 1 (Chapter 1): Porter's diamond**  
This is a preliminary activity to give students an opportunity to begin a concrete analysis; they are not expected to undertake a detailed study.  
Students will have to compile sources of information as a first stage of a competitiveness analysis of a concrete country or industry, according to the diamond model.  
Through this activity, they will do the first and fundamental part of an industry and country analysis. However, this activity will also help them in doing research on other subjects, since it will provide them with a list of sources on macroeconomic and sector-specific data and qualitative information.  
Moreover, the activity will contribute to achieving the learning objectives of the chapter since it makes students recall the determinants of Porter's diamond and test the usability and relevance of the approach, when trying to find concrete data.  
The activity can be complemented by a discussion. You can find proposals for discussion questions in the activities document. | - The search can be done off the class hours, during the class then the presentation and a discussion.  
- To make the activity shorter, the lecturer could also decide to do just a brainstorming during class.  
- It could be helpful to provide students one complete example  
- The data they collect can be used later in the module for a more complete analytical case study. |
| **Other skills:** data research and presentation | | | |
| **2.1 The IMD model of competitiveness** | - To recall the four dimensions of competitiveness  
- To come up with criticisms/identify gaps due to oversimplification | **Activity 2 (Chapter 2.1): IMD Dimensions of Competitiveness** aims at applying the four dimensions to concrete country examples.  
**Two discussion questions** can help to achieve the second learning objective of the chapter. | |
<p>| <strong>2.2 OECD and</strong> | - To understand of the role of the | The OECD part is also quite short; one discussion | |</p>
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<td>competitiveness</td>
<td>OECD in promoting the concept of competitiveness</td>
<td><strong>question</strong> can help to highlight the importance of the organisation for the competitiveness debate.</td>
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| 3. Systemic competitiveness | • To explain, what meta, macro, meso and micro means and to name examples at different levels of geographic aggregation  
• To recognise the range of intellectual influences on the systemic approach  
• To identify problems/gaps with this approach | Two activities are proposed for the systemic approach.  
**Activity 3 (Chapter 3)** will make students apply their knowledge concerning the four levels of determinants to a concrete case.  
**Activity 4 (Chapter 3)** will highlight the importance of different concepts out of economics, political and social sciences for systemic competitiveness. Students will have to identify the corresponding ideas in different text extracts and discuss the results in pairs or in small groups.  
**Discussion and review questions** will further enhance the understanding of the systemic approach. | Other/more texts can be used in Activity 4. |
| Discussion, Wrap-up and feedback | • Compare different approaches                                                               | Students could add new elements to the “competitiveness mind-map” they started after module 1.  
The last question under the activities regarding systemic competitiveness could be used to start a discussion where students compare the different approaches. |                                                                                                          |
In this Module, activities should focus on discussion. Therefore it might be better to reduce the number of activities and to leave enough time for students to exchange their opinions on the different measurements and indicators. Although the module addresses the subject of measurement of competitiveness, it raises also questions concerning general problems in measurement.

The data that is included in the handbook text is not always very new, since the focus lies more on the measurement approach than on the concrete data.

## MODULE 3: Assessment and Measurement of Competitiveness

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| 1. Macroeconomic and Microeconomic Indicators | • Explain the importance of indicators - why they matter  
• Explain which macroeconomic and microeconomic indicators have been used to assess competitiveness  
• Assess strengths and weaknesses of the indicators in order to understand their limits in explaining competitiveness and to justify the choice of indicators used in project work on competitiveness.  
• Apply their knowledge to practical examples, to analyse figures and charts and to draw conclusions on the competitive position of a country/an industry. At the same time they should be able to point out the limits of their assessment and to propose how the measurement can be enriched/improved. | Activity 1 (Chapter 1) will enhance the understanding of macroeconomic and microeconomic indicators of competitiveness. By analysing the discussed indicators with graphs and figures, the students will have to draw conclusions with regard to the implicit information on competitiveness. | The lecturer can provide more or less guiding questions/ use more complex figures depending on the level of knowledge of the students. |
| 2.1 Rankings - GCR and WCY | • Understand the conceptual background of both rankings  
• Analyse and compare the methodology of the GCR and the | In Activity 2 (Chapter 2) students should become aware of the difficulty in creating surveys - choosing the right sample and formulating questions. | Need to find out what kind of prior knowledge they have of survey/research design |
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<td>WCY</td>
<td>• Use the information given in both rankings and country profiles in further country/industry competitiveness analysis</td>
<td><strong>Activity 3 (Chapter 2)</strong> will make students work with the reports, while the lecture focused more on providing the theoretical framework (methodology, strengths and weaknesses). Students will have to critically analyze concrete country examples, looking both at the performance in different rankings and the given reasons behind. This part overlaps with the next module, where the specific determinants behind overall competitiveness will be analyzed. The focus should however be on the used indicators and the construction of indices. You can add questions about guidelines to follow when constructing and evaluating questionnaires. Some activities can only be done if the whole report is available. Some activities are possible based on the information that can be downloaded from the WEF/the IMD websites.</td>
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<td><strong>2.2 Benchmarking - UNIDO Scoreboard</strong></td>
<td>• Understand and explain the methodology of the UNIDO scoreboard • Use the UNIDO scoreboard as complementary measure for competitive performance of industries</td>
<td>With <strong>Activity 4 (Chapter 2)</strong> students will apply the acquired knowledge and carry out one complete benchmarking analysis. Also this activity enters already in the discussion of determinants since one part of the benchmarking exercise will consist in identifying constraints and strengths in drivers of industrial competitiveness for one specific case.</td>
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<td><strong>2.3 Critique Rankings</strong></td>
<td>• Explain the limitations of rankings as indicators of competitiveness - Regarding the methodology - Regarding the practicability in case of developing countries • Discuss why they have an impact</td>
<td><strong>Activity 2</strong> will already imply some critical discussion of the use of rankings since students will notice e.g. differences between the GCR and the WCY and consequently question the used methodologies. Several discussion questions could also address critical issues in measurement.</td>
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<td><strong>MODULE 4: Determinants of competitiveness</strong></td>
<td><strong>Meta-, macro-, meso- and microlevel determinants</strong></td>
<td>Get an overview about possible determinants of competitiveness at the meta-, macro-, meso- and microlevel.</td>
<td>The module does not provide comprehensive lecture notes but is based on a list of questions that can guide students through their analysis. The exercise of linking determinants and examining causal effects however has to be mainly covered by students themselves. The activities (Module 4) can help hereby, and especially the simulation/the final project will contribute to achieve the learning objectives stated under Module 4.</td>
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<td>• Get an overview about possible determinants of competitiveness at the meta-, macro-, meso- and microlevel.</td>
<td>Be able to assess the importance of individual determinants in a particular case and detect linkages and feedback loops with other determinants.</td>
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<td>• Determine what are key requisites for competitiveness and what are complementary factors.</td>
<td>Understand link between economic competitiveness and social efficiency/development and detect situations when competitiveness strategies do not translate into development gains at societal level.</td>
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<td>The activities in Module 4 do not cover all parts of the module but serve as examples.</td>
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<td>Students can get additional information about social capital by viewing a video from the World Bank, showing a roundtable discussion about this topic.</td>
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<td><strong>Activity 1</strong> is a case study on public-private dialogue/partnerships based on the Senegalese experience. Questions can guide the students through the case study.</td>
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<td><strong>Activity 2</strong>: Government interventions and targeted industrial policies – based on the experience of the NIEs and particularly Taiwan, the activity supports discussion on both an efficient degree of government intervention and possible ways of industrial targeting.</td>
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<td><strong>Activity 3 and 4</strong>: There are two activities that analyse the effect of changes in exchange rates on competitiveness. The first activity is a numerical simulation that can be used by the lecturer to visualize links between labour costs, innovative investment and exchange rates. The second activity is a case study on Exchange Rate Policy and Price Determination in Botswana. Questions help students to understand different objectives of exchange rate policy and how it is linked to prices.</td>
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<td><strong>Activity 5</strong>: Given an example of how determinants at meta-, macro-, meso- and microlevel are linked, students choose an own example (e.g. an industry) to</td>
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<td>(At the end of that chapter, students should be able to..)</td>
<td>visualize these dependencies.</td>
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<td>At the end of the activities for Module 4 you will find suggestions for essay questions/topics for presentations as well as possible subjects (broader than essay questions) for a final project.</td>
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<td>Discussion, Wrap-up and feedback</td>
<td>Students could again add new elements and complete the &quot;competitiveness mind-map&quot; they started after module 1.</td>
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Training Material on Competitiveness and Development

MODULE 1: INTRODUCTION TO COMPETITIVENESS

1. What is competitiveness?

1.1 Different definitions of and views on competitiveness

Defining competitiveness is a highly controversial issue. In fact, those who are trying to analyse the concept of national competitiveness, are confronted right from the beginning with the problem that there is no exact agreement on the definition. It can even happen that you find contradictory meanings in different passages of the same paper or report. Competitiveness seems to be a diffuse concept, subject to many interpretations, and so to confusion.

One way of approaching this elusive term can be to sort the various definitions and to group them. A possible approach to "unpack" the concept of competitiveness would be to ask: who is the key actor and what are the goals to be achieved by being competitive?

The given examples for definitions do not cover all views on competitiveness at the respective level. A more complete list can be found in Activity 1. Goals and determinants of competitiveness will be discussed in more depth in the following modules.

Competitiveness of an individual person

"An aggressive willingness to compete"
www.cogsci.princeton.edu/cgi-bin/webwn, February 2005
"National Competitive Recruitment Examination"
UN recruitment for professional positions

Competitiveness starts already at the individual level. It is often associated with the willingness of an individual to seek the competition with others. The individual goal would be to perform better than others, based on physical superiority, intelligence, specific knowledge, experience etc. It could also to optimize the own performance with regard to the previous level of performance. The expression aggressive shows one possible characteristic of competitive behaviour. However, competitiveness can also be based on attractiveness. We will analyse the two contrary terms, which can be also applied to companies, industries and countries, in more detail in Module 2, when the concept of competitiveness of the International Institute of Management will be presented.

Competitiveness of a company

"Competitive advantage at firm level is the ability to consistently and profitably deliver products and services which customers are willing to purchase in preference to those of competitors."
Department of Enterprise, Trade and Employment, UK
Traditionally, competitiveness is used at the microeconomic level, which means, describing the competitive situation to which a company is exposed. Looking at the definition given above, one can already deduct several features of competitiveness at firm level:

Products and services, which are offered by a company, must have characteristics, which make them attractive for potential customers and convince them in the process of their buying decision. This attractiveness can be due to low prices and/or differentiation. Differentiation can be achieved in many ways, e.g. through design, quality, additional services and innovative features. Moreover, the company must produce and deliver profitably, that means that the profit margin after having subtracted costs from incomes, has to be sufficiently high to ensure a consistent business. Apart from product competitiveness, a company can also try to become and remain competitive with regard to processes in the supply chain management (such as speeding up the distribution of goods to retailers or improving the quality of the inventory control) or the production process. With regard to the management of human resources, competitiveness can also be seen as a matter of encouraging entrepreneurship. This means supporting employees to maintain or develop the initiative, creativity and discipline to establish, operate and improve business activities. One of the most important factors for competitiveness is the knowledge of the market, including e.g. preferences of consumers and the ability to adapt quickly to changes in quality and quantity of demand. Market knowledge is a key condition in order to trade successfully, both on domestic and international markets.

Depending on the strategic plan of a company, it can set different priorities within its "competitiveness strategy". Therefore, the overall goals and concrete objectives might be ranked in different orders, if you look at different companies. They range from clear monetary goals like performing better than comparable firms regarding the volume of sales and market share, to non-price factors like productivity, efficiency and even qualitative aspects such as the corporate image. The company needs strategic thinking to place single objectives in the mosaic of the overall goal of competitiveness.

In spite of differing priorities, all companies should see competitiveness as a way to ensure their survival. This will not be the case, if a company does not have to be competitive, due to e.g. a monopolistic or oligopolistic position or a heavily and on a long-term basis subsidized market structure.

**Competitiveness of a nation**

"Competitiveness of Nations is a field of Economic knowledge, which analyses the facts and policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people."

World Competitiveness Yearbook 2003

Can nations really compete with each other? It was still relatively easy to define competitiveness for a company. If we look now at the definition given above, it seems much more complex, evasive and thus difficult. A country can have one or several competitive industries, it is impossible, however, that a nation’s firms are competitive in all sectors. In fact, there has been a long debate about the notion of competitiveness at country level. Is it possible to regard and analyse a country as if it was a big company?

" Speaking ahead of the CBI’s [Confederation of British Industry] national conference next week, Mr. Jones said growing militancy among trade unionists was putting up "a very bad
sign for UK plc [Public Limited Company] abroad". Other nations are catching us up... alarm
bells are ringing about whether we are as competitive as we used to be..."

In a very narrow sense, competitiveness refers simply to comparisons of prices and costs across
countries. If we interpret national competitiveness in a little bit broader terms and look as well at one
possible indicator of competitiveness, it will become a synonym of increased aggregate productivity
together with a high income-level. Another view, that can often be found, is to interpret
competitiveness as a country's ability to compete in trade, especially in exports. However, if you had
to assess the following examples, would export here really enhance competitiveness?

- Country A managed to increase the export of unprocessed resources
- Country B improved its short-term performance in manufactured exports based on the
  exploitation of a static advantage like cheap unskilled labour

Put both views together, national competitiveness relates both to the national income and the
international trade performance, particularly with regard to industrial sectors that are important in
terms of, for example, employment or productivity and growth potential. Those are all interpretations,
which do not appear as such in the definition given above.

One of the most important and best-known contributions to the question if it makes sense to apply
the concept of competitiveness to the national level, came from Paul R. Krugman, a professor for
Economics and International Affairs who has taught at Yale, MIT, Princeton and Stanford University
and considered one of the founders of the "new trade theory".

Krugman (1994) questions seriously the proposition that the notion of competition and
competitiveness can be transferred to the country level. He names competitiveness a meaningless
word when applied to national economies, which can even become a wrong and dangerous obsession.
Krugman criticises the concept of national competitiveness (i) from a substantive point of view, (ii)
because of the misuse of the concept and (iii) he describes which policy implications such a misuse
would have.

i) Why it does not make sense to examine competitiveness at the national level.

Krugman points out that there is no well defined bottom-line for countries such as bankruptcy for
companies. Moreover, there is no need for the concept of competitiveness, since other concepts do
already cover, what competitiveness means. In case of a country with little international trade,
competitiveness means just productivity growth. Krugman states that even if trade becomes more
important, real income continues to be predominantly dependent on the domestic productivity growth
(example of US economy from 1973 to 1990). He concludes that national living standards are to the
greatest extent determined by domestic factors (such as labour productivity) rather than by some
competition for world markets. Krugman emphasises the fact that countries, while they sell products
that compete with each other, can be each other's main export markets and each other's main
suppliers of useful imports. International trade is therefore not a zero-sum game: if the European
economy does well, it is not automatically at the expense of the United States. On the contrary, a
healthy European economy can provide larger markets to the U.S. economy.

ii) Why politicians and researcher define nevertheless economic problems as ones of
international competition.

Krugman criticises the fact that political leaders all over the world put forward the diagnosis that a
country's economic fortune is largely determined by its success on world markets. The attractiveness
of competitiveness is based on the fact that competitive images are exciting, “marketable” products, so to say. Besides, problems of competition in international markets may seem easier to solve than domestic productivity problems. Politicians would use the term competitiveness to deceive both themselves and the public. Finally, it is a useful metaphor to justify both good and hard choices in policies or to avoid them. Central European leaders, such as the German chancellor Gerhard Schröder, have justified reforms of the national health system or the cutting of unemployment benefits on the basis of competitiveness. Politicians could also emphasize competitiveness as part of a “communication strategy” with the aim of becoming more attractive for foreign investors.

iii) Thinking in terms of competitiveness leads, directly or indirectly, to bad economic policies.

According to Krugman, thinking in terms of competitiveness can cause wasteful spending of government money to supposedly enhance the national level of competitiveness. Governments would rather invest in industries that compete internationally and less in industries of real importance for the economy (e.g. in terms of employment), which compete however more on the domestic market. Krugman underlines the danger that competitiveness could lead to protectionism and trade wars. People might discuss competitiveness as an excuse for economic nationalism (blame all problems on foreigners and retreat into protectionism), if a country seems not to be winning the “global trade game”. Talking about competitiveness at country level can represent a “dangerous obsession”, because it leads to the notion that a country's economic strength is measured by its external trade surplus. That would mean that imports are undesirable because they displace national employment, and that low salaries in poor countries are a threat to growth in richer countries.

The most important danger would be that politicians start viewing the whole range of policies in the light of competitiveness (i.e. competitiveness would become a kind of doctrine), even if most policy issues have nothing to do with the competitiveness debate. This can guide governments towards more interventionism and thus market distortions, even in fields with few international linkages.

Similar to the last part of the critique voiced by Krugman, one can detect the reason why neoclassic economists generally do object the concept of national competitiveness, where governments tend to play an active role: it goes directly against the assumptions and beliefs which are fundamental for neoclassical economics. In simple neoclassical models of trade, there is no need for policies to facilitate efficient production and exchange of goods and services. On the contrary: as long as there are efficient markets and perfect competition, interventions would deviate the economy from its equilibrium path and reduce national welfare. If you talk however about competitiveness at the national level and do not limit the concept to the totality of companies and industries, you assume that the government can play an important role in improving the conditions under which companies are competing and that this is so because imperfect condition does exist.

A more moderate neoclassical position accepts the possibility of imperfect competition and market failures and that governments could in theory intervene and improve competitiveness by choosing the right policies. However, they estimate the possible government failure as worse than the market failure, so that in practice, competitiveness is still a dangerous obsession.

In spite of the critique - Why does it make sense to talk about competitiveness?

Krugman underlined that focusing exclusively on trade shares can countries lead into mercantilism, if the benefits of specialization and the non-zero-sum results of trade are denied. The problematic
nature of competitiveness he presents in “Competitiveness: a dangerous obsession”, can be perceived therefore as due to the fact that he links competitiveness only to international trade. According to him, competitiveness equals international competition. Other economists and institutions tried to find a broader, more comprehensive definition of national competitiveness. One example is the definition from the World Economic Forum, given above. From that one and other definitions, we can describe in broader terms, how competitiveness at national level can be perceived:

- Nations compete in creating the conditions that attract and encourage domestic and foreign investors to invest within the national borders.
- Nations can also try to encourage domestic companies to invest abroad, under the condition that such investments will contribute to enhancing international presence and market proximity.
- Nations compete in providing an optimal policy, structural and institutional framework, which is fundamental to facilitate constant upgrading at a company or industry level, to promote the spread of technology and to open up trade opportunities. Many of the factors underlying the competitiveness of individual enterprises are determined at the level of the national economy.
- Nations compete through developing and implementing adequate programmes and incentive systems that enable companies to develop and increase their competitive advantages and to enhance their participation in both international and domestic markets (ILO 1999/2000).

And what is competitiveness not?
After having examined, what competitiveness can mean, we can further qualify the notion of competitiveness by defining, what it does not refer to.
A country is not necessarily competitive in case of:
- Consistently and on a long-term basis subsidized exports.
- Export success in all sectors: no country can be competitive in all industries at the same time.
- Preserving the existing industrial base. In the process of entering segments that involve higher productivity and offer gains in competitiveness, there will be normally other industries that are left behind.
- Low wages or a favourable exchange rate.

Goals of competitiveness at the national level

"Competitiveness implies elements of productivity, efficiency and profitability. But it is not an end in itself or a target. It is a powerful means to achieve rising living standards and increasing social welfare - a tool for achieving targets. Globally, by increasing productivity and efficiency in the context of international specialization, competitiveness provides the basis for raising peoples' earnings in a non-inflationary way."

*Competitiveness Advisory Group (Ciampi Group). Second report to the President of the Commission, the Prime Ministers and the Heads of State, 1995.*

If we look now at the ultimate goals of competitiveness at national level, we will find in most definitions as key objectives to raise welfare, living standards and in other cases to reduce poverty - all "domestic" goals, which are not necessarily viewed in comparison with other countries. Other “sub-objectives” may be defined, that help to achieve the main objective. Such objectives could be e.g. to stimulate investment, broaden the national base of human capital, enhance technological innovation and dissemination or restore a trade balance equilibrium. However, competitiveness can normally not
be achieved by focusing only on one “sub-objective” – linkages with other levels and players of the
economy have to be taken into consideration. A good result in one field is not relevant in itself, but
depends on the means employed and on the context in which it was achieved. So is a reduced trade
deficit not always associated with improved competitiveness, it can also be due to e.g. a decline in
imports stemming from weaker domestic consumption. (OECD)
In this sense, also productivity and efficiency can be only indicators of national competitiveness if
there is a simultaneous increase in living standards.

1.2 The relativity of competitiveness

The following questions can illustrate the relativity of competitiveness - at individual, company or
country level:

a) How well is a country performing compared to other countries?
Spontaneously, we relate to the term competitiveness the comparison of our company, country or
region with others. On the firm level, a company has to benchmark its own performance with the one
of a main competitor. Several definitions emphasized the performance of a country on the global
market. Competitiveness can thus never be absolute; we need always a yardstick to determine our
level of competitiveness.

b) Is one doing as good as possible? And what are the aspirations?
In the first question, competitiveness refers to the comparison with other companies or countries.
However, we could also define our goals and determine our competitiveness in reference to our own
aspirations and preferences, our performance in the past and considering levels of technology and
capabilities as constraints. The critical issue in case of a country is e.g. whether it is making the best
use of its resources, whereby resources include also endogenous resources like technology and
human capital.
Obviously, this conception of competitiveness will be difficult to measure, at least in quantitative
terms.

1.3 Summary of the main characteristics and dimensions of competitiveness

| Narrow sense versus broader sense | In the narrow sense, competitiveness refers to comparisons of prices or costs across countries or external balances. In a broader sense, it means comparisons of welfare, factor incomes and other macroeconomic goals (inflation, unemployment, currency). More comprehensive definitions include social and environmental targets. The national competitiveness goals in the broad sense have economic, but also political and social components. Will we, consequently, have to approach a possible competitiveness-enhancing strategy from all angles: economic, political as well as social ones? |
| Different actors, stakeholders. Interdependence | Apart from the different levels of competitiveness we identified, it will be necessary in the forthcoming modules to include the role of other stakeholders in the debate and analysis, such as governmental institutions, academia, consumers, civil society, international institutions etc. A key question will be to determine, whether policies enable competitiveness at firm level and whether competitiveness, e.g. in form of productivity gains of individual companies translate into benefits for the overall economy and society - to determine the links between the level of a company or an industry |

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and the overall economy and society. Moreover, we will have to analyse the linkages among different determinants of competitiveness. There is no single magic source of competitiveness. At the national level, no single policy will support competitiveness. At the firm level, no single decision will create it. Competitiveness should be viewed as the result of interactions within a complex system.

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<th>Long term versus short term perspective and the dynamic dimension of competitiveness</th>
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<td>The time factor can determine the success of any action. Since the period of time required for an “adjustment plan”, which comprises all actions to achieve an increase in competitiveness, differs for each competitor, any performance comparisons could be distorted if this factor were not taken into account. Moreover, what seems a negative indicator for competitiveness in the short term, such as a trade balance deficit, can be positive in a longer-term perspective. At the national level, competitiveness should not be seen as short-term advantage, such as being a low-cost producer, but as being competitive in activities that lead to long-term (sustainable) income growth. A very important characteristic of competitiveness is its dynamic dimension: whatever the level we look at is (region, country, company etc.) it is the ability to adapt to changes, which determines the level and character of competitiveness. The competitive position as well as the sources of competitiveness will also change over time. Therefore, it makes sense to evaluate competitiveness not only based on results already obtained (ex post information). This kind of information does not provide any indication of a country’s potential to achieve its objectives in the future (ex ante evaluation). Ex ante evaluation is much more difficult, but it is fundamental in order to decide on adequate policies. Competitiveness has to be analysed as a process, not only as a state.</td>
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<th>Relativity</th>
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<td>Absolute standards compare “level of competitiveness” with some natural yardstick, some neighbour or the technological leader. Relative standards stress comparisons with the own past, are relative to the national potential, history and ambitions. Moreover, it is important to take into account, how quickly the competitiveness objectives can be obtained. This depends on the flexibility and the “starting point”, the stage of development when we talk about country competitiveness.</td>
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We have studied and discussed definitions of competitiveness at the level of an individual, a company and a nation. Those are of course not the only levels on which competitiveness can be analysed. It is important to examine competitiveness also for e.g.:

- Industries or clusters, often a better indicator of the economic health of a nation than competitiveness at the firm level, considering also the role of Transnational Companies,
- Regions within a country or
- Supranational entities and regions, such as Mercosur, the European Union, OECD countries, G8 countries etc.

The focus of this training material will lie more on the broad view of competitiveness, less on the very narrow one. In the latter, as we have seen, national competitiveness means comparisons of prices between countries, which would be analysed based on relative real exchange rate movements between countries, taking account of relative inflation and real wage changes. In this context, a

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country becomes less competitive when its real exchange rate appreciates compared to the main competitors. The appreciation leads to a rise in the relative prices of the country's traded products, which means, they become more expensive in comparison to the other countries' products.\(^1\) We will look at exchange rate policy as one important determinant of national competitiveness in Module 4. We will in general also focus more on the broader sense, presenting however also theories and ways of measurement which are based on a narrow definition.

1. **History of the concept of competitiveness**

We have seen, that it is very difficult to find one precise definition of what is competitiveness. Scholars and institutions could not even agree on definitions after having it broken down to the levels of competitiveness of a firm, a sector or a nation.

The knowledge about the history of the concepts, its precursors and pathfinders and the roots of the competitiveness controversy may help us to understand on which theories and historical events competitiveness is based and why it has become so important particularly now.

2.1 **Thoughts and theories that contributed to the concept of competitiveness**

In spite of the quite recent appearance of the term competitiveness, one can pursue its way back in history and find out that it addresses issues, which have been central in public policy for at least 300 years, although under different headings. On the other hand, the raise of competitiveness may also question the universal applicability of the neoclassical economic paradigm.

The table below presents the main contributions to the development of the concept of competitiveness. It does not pretend to be comprehensive.

<table>
<thead>
<tr>
<th>Theory/Concept</th>
<th>Key issues/findings</th>
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• Absolute advantage; division of labour and increasing returns to scale as major causes of specialization and trade. Countries differ in their ability to produce goods efficiently. The theory suggests that a country should specialize in producing goods in areas where it has an absolute advantage and import goods in areas where other countries have an absolute advantage.  
• Trade enables each country to consume more with a given amount of labour.  
• Free trade and laissez-faire: against protectionism, government should not interfere in the market |
| David Ricardo (1772 – 1823), "Principles of Political Economy and Taxation", 1817 | • A country should specialize in producing those goods that it can produce most efficiently, while importing goods that it can produce relatively less efficiently. That can even mean that it buys goods from other countries that it could produce more efficiently itself.  
• Unrestricted trade brings about increased world production; that |

\(^1\) For more information see Boltho (1996): "The assessment: international competitiveness". Oxford Review of Economic Policy, 12(3), 1-16. The Financial Times publishes also regularly competitiveness data based on unit labour costs and real exchange rates (only for developed countries).
means, that trade is a positive-sum game.

- Opening a country to free trade stimulates economic growth.

<table>
<thead>
<tr>
<th>Eli Heckscher and Bertil Ohlin (1919/1933) Comparative Advantage II</th>
<th>The pattern of international trade is determined by differences in factor endowments. Countries will export those goods that make intensive use of locally abundant factors and will import goods that make intensive use of factors that are locally scarce.</th>
</tr>
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</table>
| Friedrich List (1789 - 1846), "The National System of Political Economy", 1841 | Governments should create policies (a strategy) to promote "national productive power" by enhancing the manufacturing industry.
- Infant Industry Argument: temporary, targeted protection necessary for countries at early stages of industrialization, if some countries "outdistanced others in manufactures". |
| The Marxist economists; Karl Marx (1818 – 1883), "Capital: A Critique of Political Economy", 1867 | Highlighted the impact of the socio-political environment on economic development. Saw the development of free-market capitalism in terms of class-conflict between workers, capitalists and the bourgeoisie. Marxist thinkers recognize that capitalism promotes creativity and innovation but at the expense of turning labour/workers into alienated "wage slaves" unable to fulfill their human potential. Competition creates winners but many more losers. Instead, Marxist thinkers promote an egalitarian view where "competitiveness" would be defined in terms of equality of outcome. |
| Max Weber (1864 – 1920), "Ethic of Protestantism and the Spirit of Capitalism", 1905 | German sociologist, who established the relationship between values, religious beliefs and the economic performance of nations. |
| Joseph A. Schumpeter (1883 – 1950), "Capitalism, Socialism and Democracy", 1942 | Schumpeter emphasized the role of the entrepreneur as a factor of competitiveness. He underlined that progress is the result of disequilibria, which favour innovation and technological improvement → "creative destruction". The creative destruction is clustered around a few activities. |
| Alfred P. Sloan (1875 – 1965), "My Years at General Motors", 1963; Peter Drucker, "The Age of Discontinuity", 1969 | Development of the concept of management as a key input factor for competitiveness, including views on strategy and entrepreneurship, and ideas on executive effectiveness. |
| Robert Solow (1924 -), "Technical Change and the Aggregate Production Function", 1957 | Solow studied the factors underlying economic growth in the US between 1948 and 1982 to highlight the importance of education, technological innovation and increased know-how. |
| New trade theory P.R. Krugman and others | In those industries where substantial economies of scale imply that the world market will profitably support only a few firms, countries may predominate in the export of certain products, simply because they had a firm that was a first mover in that industry. |
| R.E. Lucas and P. Romer | Lucas and Romer contributed with regard to the role of human capital and innovation for growth and competitiveness. Negroponte and numerous modern economists refined further the concept of "Knowledge" and highlighted the importance of technology as the most recent input factor in competitiveness. |

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<th>Michael Porter, “The Competitive Advantage of Nations” (1990)</th>
<th>Michael Porter has tried to aggregate some of the past ideas into a systemic model, called the Competitiveness Diamond, where trade is influenced by: (a) factor endowments, (b) domestic demand structure, (c) relating and supporting industries, (d) firm strategy, structure, rivalry (see MODULE 2)</th>
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<tr>
<td>Porter’s influences</td>
<td>Consulting firms, such as McKinsey, Boston Consulting Group, Monitor Company, and business schools, picked up Porter’s models. While the models were in the beginning mainly applied to firms and industries, they were consequently transferred to countries, regions and clusters. Moreover, governments and regional blocks, international organisations and institutions such as OECD, World Bank and DFID became interested in the subject of competitiveness.</td>
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Analysing the evolution of competitiveness-related issues, one can determine, that:

- The related concepts dealt first almost exclusively with issues of international trade. However, we can observe that other factors such as human capital, innovation, socio-cultural determinants and management have been integrated over the time.
- Key questions: role of government interventions versus laissez-faire, which is again based on the assumptions perfect competition versus imperfect competition
- Historical and cultural backgrounds of theories. Theories have been developed in the light of a concrete historical situation, which differs depending not only on the time, but also on the country, its culture and religious background.

### 2.2 Why does competitiveness question neoclassic economic theory?

Behind competitiveness, there is a key element of imperfect competition, and this prevents factor price equalization, which is again an important element of neoclassic trade theory (Reinert, 1995). The idea of a nation lifting itself to higher levels of living standards through competitiveness, i.e. being engaged in activities that raise the national living standards more than other activities, goes directly against the assumptions of the neoclassical economic theory, where all activities are alike (e.g. to engage in agriculture is considered tantamount to manufacturing activities) and are carried out by representative firms under conditions of perfect competition.

In the neoclassical world, additional wealth (by improving the technology) is supposed to be spread through lowered wages. In the real world, however, it is also possible that an important portion of benefits from technological change is being distributed inside the producing nations through higher profits, wages and taxable income overall. In this case, the producer (company or nation) of goods retains an important part of the benefits of improved productivity, and the retained part is a sort of industry rent at national level. If this were happening, a "competitiveness strategy" would be to locate industries, where high industry rents exist. Competitiveness as income-raising effect can then be achieved through appropriation of this rent.

That kind of dynamic rent-seeking, as key factor for both growth and competitiveness, is only possible if important industries are characterized by imperfect information, entry barriers and increasing returns to scale. This brings nations to foster activities with the highest potential for an increase in productivity and to see government interventions, refused by the pure neoclassical economists, as part of a national strategy.
2.3 How did globalisation condition and shape the concept of competitiveness?

History shows, that competitiveness has always been a concern among companies as well as policy makers, that it is a concept of which we can analyse its roots and origins. Nevertheless, there is something new about the competitiveness debate of our days. The novelty lies in the speed with which the nature of international competition is changing and the suddenness with which it is affecting individual companies (S. Lall, 2001). The need for the concept of competitiveness explains itself out of the need to integrate global political-economic trends and changes in the organizational pattern of societies and industries into the theories on comparative advantage and growth.

The main forces of rapid integration of the world economy, which are leading to new competitiveness requirements:

- World trade and foreign investment are growing faster than world output. Competitiveness in industries, which are subject to international trade and foreign direct investment, can therefore provide opportunities for economic growth.
- All over the world, policies are moving economies towards trade liberalization and market oriented economies. Companies face increased competition both on export markets and domestic markets (competition from imported products). Freer flow of capital (FDI and portfolio investment).
- Increasing Intra-Industry and Intra-Firm trade, together with a more crucial role of Multinational Corporations (MNCs) and Transnational Corporations (TNCs).
- Fast advancements in information technologies, production processes and advances in new scientific fields: competition takes always new and changing forms to which both companies and nations have to adapt their strategies. On the other hand, enterprises can adopt production and organizational systems that improve the capacity to produce products and services at lower costs, improve quality and increase speed of delivery. Advances in new scientific fields accelerate the product obsolescence.
- Prices for transport and telecommunication are falling, speed is increasing: economic space is shrinking, competition becomes more immediate, but still more costly for developing countries. Customers are better informed and demand more product differentiation and specialisation.
- Internationalisation of production (goods and services): the various elements that enter as input a production process may come from many sources all over the world.

Is trade the priority?

Although globalisation enhanced the importance of international competition, we have to be aware of the fact that trade is not the only objective when talking about competitiveness. Competitiveness in the non-traded sector is also of extreme importance for a country's economic health. In most countries represents the non-traded sector a large proportion of the economy. For this reason it will be crucial in the further analysis of the concept of competitiveness, its determinants and possible enhancing "strategies" to strive for minimization of inefficiencies in the non-traded sector. Its competitiveness has a huge impact on the competitiveness of the traded sector, which relies on the supply of a wide range of products and services.

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Impacts of globalisation on the context of policy making: Policy Space and Policy coherence

Globalisation had another impact: the context for policy making has changed very much over the past decade, so that not all examples of achievements in competitiveness can be applied to our current situation.

Today, international rules are very different and they influence to greater extent, what national governments can do. Some decades ago, selective policies were accepted. Now, many policies cannot be applied any longer (although there might still be some exceptions), such as selective import protection, export subsidies, directed credit and differential interest rates, performance rules for foreign investors etc. are all policies that are not accepted in the multilateral trading system and it central institution, the World Trade Organization. Countries are better prevented against arbitrary interventions. On the other hand, they are more and more constrained in their national policies in favour of national economic interests. Similar dependencies have been created by the integration into an international financial system, where the IMF can bind credits to certain macroeconomic policies. The result: The national policy space has been diminishing.

Another concept, which arose with the increased integration in the international trading and financial systems, is that of policy coherence. The goal is to enhance the coherence between national development strategies and the international trading, monetary and financial systems (e.g. between country A and WTO/IMF), as well as policy coherence between and within the various aspects/sectors of the global economy that impact on development prospects of developing countries (e.g. between WTO and IMF). This coherence would contribute to maximizing the developmental effects of integration into the world economy.

2. Competitiveness and Development

3.1 Competitiveness in developing countries

As we have seen in the historical review of the origins of the concept of competitiveness, it was the governments, consultancies, companies and academic institutions in developed countries, which first expressed concerns about the future of their economic leadership and started to analyse and discuss the notion of international competitiveness. The U.S., Japan and the EU, among others, have invested heavily in analysing competitiveness issues.

In contrast with developed economies, with some exceptions, there has been during a long time little interest in national competitiveness issues among policy-makers in developing countries (UNIDO 2000). In several developing economies, structural adjustment policies (SAPs) of the IMF and the World Bank have formed the backbone of the policy agenda for growth and exporting. SAPs have focussed attention on removing distortions created by past government actions to the working of the market mechanism. Meanwhile, competitiveness policies (e.g. public policy actions dealing with technology and the allocation of resources between different industries) have been neglected in adjustment programmes.

However, with steadily increasing liberalization and integration into global markets, trade and financial systems, the concern about competitiveness has spread also to many developing countries. But whereas rich countries worry about keeping ahead, poorer countries try to catch-up and to avoid the risk of remaining limited to low-wage products and commodities.

Although not all determinants may be applicable to the situation of a developing country, and less to a Least-Developed-Country, the analysis of competitiveness is fundamental, since it can help to organize and characterize the influence of features unique to developing countries that hold back development,
and in the process it may help to identify some of the key leverage points for these nations. In addition, firms from developing countries often have to compete with firms from developed countries. It is therefore important to understand all the potential sources of advantage of the other countries, being developed or developing.

3.2 Development - a goal of competitiveness? Competitiveness - a way to achieve development?

As we have seen in the definitions and the historical background is competitiveness not a pure economic concept. In its broad sense, competitiveness is based on the linkages between different levels and actors as well as a long-term view, and so is development. The development potential of an economy is therefore determined by its ability to foster competitiveness across the economy. The comprehensive definitions of competitiveness state as key aims to achieve an increase in welfare and living standards, whereby one of the objectives would be to raise the income-level. Changes in the relative importance of different economic sectors could e.g. represent a key factor for rapid and sustained productivity growth and higher living standards. If we consider even more comprehensive concepts, which include e.g. the environment in their analyses, sustainable development will become one of the goals of national competitiveness.

To sum up: if we take as a starting point a broad approach to competitiveness, a whole development strategy can be based on the concept of competitiveness. To think about competitiveness at the national level can help to identify, communicate and achieve complementary objectives for both economic and social development.

This is not necessarily the case if we base our analysis of competitiveness on a narrower definition or if we try to apply a "competitiveness framework" that does not consider local circumstances. In the following modules, we will further examine the nature of the relationship competitiveness - development and how it is conditioned by the definition of competitiveness we choose and by the approach we apply.

KEY READINGS


This short paper in French gives a brief overview of definitions of competitiveness at company and national level. It also lists some indicators and determinants, issues that are examined in depth in the following modules.


Krugman's paper outlines the fundamental critiques with regard to the concept of national competitiveness and most papers dealing with the subject refer to it. The main points are summarized in the handbook text, but it will be useful to read the whole text.


This paper examines the previous economic concepts that contributed to the concept of competitiveness. It looks at "competitiveness" policies in England, Japan, the United States and Germany. For those who are interested in the historical perspective: Chang, Ha-Joon (2002): *Kicking away the ladder. Development Strategy in Historical Perspective*. Anthem Press. is based on Reinert but extends his thoughts.

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The reading for this module would be Chapter 1: "What competitiveness is and why it is important". Lall outlines different definitions of competitiveness, comments Krugman's critical position and gives a short overview of determinants of competitiveness.


The Annex of the TDR 2004 gives a brief introduction into the concept of competitiveness, comments also the objections raised against the concept of competitiveness at national level. It outlines then important conditions for competitiveness at micro and macro levels and highlights some specific constraints in developing countries.
Activities Module 1

Activity 1 (Chapter 1.1): Definition and characteristics of Competitiveness

Objective of the activity:
This activity is aimed to get students involved in the content, encourage discussion and to create a learning atmosphere where interaction is fundamental. The activity could help the lecturer to determine the level of knowledge of the students. The activity contributes directly to achieving the learning objectives of the section since it makes students analyze definitions with regard to different levels (nation, company etc.), find out some of the characteristics and get a feeling for the complexity of the concept.

Tips & Comments:
If concepts contained in the definitions are not clear to the students, the lecturer could review them during class. The activity could be split into two parts, leaving the formulation of a possible definition for the end of the chapter. In order to keep the activity focused you might want to set time-limits for each of the stages of the activity e.g. write down everything they associate with competitiveness in only 5 minutes.

The list below shows very diverse definitions of competitiveness, which were written down without any logical structure. Divide the class into small groups of 3-4 students and:

- Find criteria to group the definitions (cut them in pieces if necessary)
- Make a list of words/expressions that you associate with competitiveness
- Analyse the definitions and come up with 5 key characteristics of competitiveness
- One out of every group presents the results to the rest of the class; writes down identified characteristics at blackboard/flipchart.
- Discuss results in plenum
- Try to formulate a definition in the class, write it down and leave it somewhere in the classroom, so that students can revise it/add thoughts throughout the course

“Competitiveness of Nations is a field of Economic knowledge, which analyses the facts and policies that shape the ability of a nation to create and maintain an environment that sustains more value creation for its enterprises and more prosperity for its people.”
World Competitiveness Yearbook 2003

"The ability of an entity to operate efficiently and productively in relation to other similar entities. Competitiveness has been used most recently to describe the overall economic performance of a nation, particularly its level of productivity, its ability to export its goods and services, and its maintenance of a high standard of living for its citizens.”
www.indiana.edu/~ipe/glossary.html, February 2005

"an aggressive willingness to compete”; "the team was full of fight"
thesci.princeton.edu/cgi-bin/webwn, February 2005

"The ability to create the preconditions for high wages"
Uri (1971)

"How successful one party is in offering favourable terms and securing the business. More favourable terms may involve a lower price, higher quality, a faster delivery time, and other aspects of the product."
highered.mcgraw-hill.com/sites/0072443901/student_view0/chapter2/glossary.html

"Fight for market shares"
Jean Louis Muchielli, 2002, p.9

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“Competitiveness” is a growth industry. Presidents and Prime ministers vow to improve it, legislators debate it, economists measure it, and editors feature it. In this context, the notion of competitiveness is typically couched in terms of one country or trading bloc versus another and the animating question is whether country x is losing or surrendering its “competitiveness” to country Y. When the unit of analysis is a firm rather than a country, the issue of competitiveness revolves around relative competitive position and competitive advantage. In this view, competitiveness comes from a “defensible” market position and a “sustainable” competitive advantage. We believe the country versus country formulation of competitiveness challenge is substantially inaccurate, and the “position and advantage” formulation is incomplete.”

Competing for the Future, Gary Hamel and C.K. Pralahad, 1994

"The ability of a country to achieve sustained high rates of growth in GDP per capita."
World Economic Forum, Global Competitiveness Report, 1996

"Competitiveness is relative and not absolute. It depends on shareholder and customer values, financial strength which determines the ability to act and react within the competitive environment and the potential of people and technology in implementing the necessary strategic changes. Competitiveness can only be sustained if an appropriate balance is maintained between these factors which can be of conflicting nature."

"the ability to sell"
Orlowski, 1982

Historians have tended to equate "competitiveness...with political, technical, commercial leadership"
Tunzelmann, 1995

"Competitiveness includes both efficiency (reaching goals at the lowest possible cost) and effectiveness (having the right goals). It is the choice of industrial goals, which is crucial. Competitiveness includes both the ends and the means towards those ends."

"The only meaningful concept of competitiveness at the national level is national productivity"
Porter, 1990

"Competitiveness should be seen as a basic means to raise the standard of living, provide jobs to the unemployed and eradicate poverty."
"Competitiveness implies elements of productivity, efficiency and profitability. But it is not an end in itself or a target. It is a powerful means to achieve rising living standards and increasing social welfare - a tool for achieving targets. Globally, by increasing productivity and efficiency in the context of international specialization, competitiveness provides the basis for raising peoples' earnings in a non-inflationary way."

"Industrial competitiveness is the ability of a company or industry to meet challenges posed by foreign competitors."
US Department of Energy

"Supporting the ability of companies, industries, regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels."
OECD, 1996

"Ability to increase or to maintain the living standard relative to comparable economies (e.g. developed industrialized countries), without long run deterioration of external balance"
EU, 1995
"The totality of factors, which are fundamental for long-term economic success."
Groupe consultatif de la Commission européenne sur la compétitivité d'une région ou d'un pays, 1998, Economie européenne, supplément A

"Competitive advantage at firm level is the ability to consistently and profitably deliver products and services which customers are willing to purchase in preference to those of competitors."
Department of Enterprise, Trade and Employment, UK

“Competitiveness has emerged as a pre-eminent issue in many nations. Achieving global competitiveness calls for a nation to upgrade its exports. Competitiveness also requires a nation’s government and companies to have a shared vision about what competitiveness is and how it can be achieved. Competitiveness is not a simple macroeconomic adjustment, a favourable exchange rate, a positive trade balance, industrial subsidies, or a low inflation rate. Rather, competitiveness is the ability to achieve high productivity, relying on an innovative deployment of human resources, capital and physical assets. Competitiveness is the capacity to create value for increasingly sophisticated customers who are willing to pay premium prices for the improved value that they perceive."

Activity 2 (Chapter 1.1): Competitiveness of nations/characteristics

Objective of the activity:
Apply theoretical concept discussed in class to concrete examples of particular characteristics and countries, so as to reinforce the learning process. This question could be integrated in the beginning of the section on competitiveness.

Discuss in the group the difference between being competitive as a nation (as a nation? Overall?) and having some activities that compete on the basis of static advantages, such as low labour costs. Find concrete examples of the latter (country/industry/at which time...), For example, think of a country that is competitive in producing software cheaply; think of a sector in your country that is competitive? Think of an industry/sector in a European country that was competitive 100 years ago but that isn't now?
Write the suggestions down on cards and pin them on the wall.

Activity 3 (Chapter 1.2): History of competitiveness

Objective of the activity:
The activity will help students to recall knowledge on economic theories that preceded and contributed to the concept of competitiveness and make help them understand the development and intellectual history of the concept as well as how understand the links and differences between other ideas and competitiveness. This comparison will use their existing level of knowledge

Tips & Comments:
Students could prepare their review of the similarities/differences out of class time and present it during the following session in class.
Depending on available time, number of students and the level of previous knowledge, the review can be given e.g. as a short oral presentation or a written summary.
The activity can lead to the discussion on competitiveness and neoclassical economic theory.

- Divide class into groups, each group prepares a brief review of a previous theory or concept.
- Present in next class to the rest of the group and explain, where they think the differences to competitiveness lay and where we find similarities (write down on the blackboard/flipchart).
- Discuss the findings of the different groups when all have presented.
Activity 4 (Chapter 1.3): Development/ Developing countries

Objective of the activity:
To encourage students to think broadly this activity should involve them in linking their comments on that question to the different historical concepts (e.g. does a certain developing country have a comparative advantage - is that also a competitive one; do culture and values contribute to making a country competitive or not).

Tips & Comments:
Students should be confronted from the very beginning with the exercise to look at competitiveness from a developmental perspective. This question will be discussed in much more detail in the following modules.

Based on students' existing understanding it might be useful to have a class brainstorm on what factors might make a Least Developed Country/ a developing country competitive and what factors might obstruct its competitiveness.

Activity 5: First Wrap-up of the Module

Objective of the activity:
Reinforce the students' process of understanding and applying knowledge of the concept to concrete examples. Enhance their understanding of the relationship between competitiveness and other key ideas in economics and development. Students will build their "own" system of competitiveness throughout the course. They have to decide, how they present competitiveness, which elements they might include or not, where they place priorities.

Tips & Comments:
Students could define a standard for symbols (arrow, rhombus, circle etc.) to visualize levels, goals, some indicators (at this stage) and determinants, linkages and dependencies throughout the rest of the course.

- Start producing a Mindmap (in paper or at the computer, but it will be more visible on paper) on the "system" of competitiveness
- Students can try to visualize different levels and stakeholders, characteristics and dimensions, linkages and feedback and causal chains.
- Leave enough space so that more elements can be added throughout the course

Questions for discussion:
The questions for discussion can be integrated at the end of the module or when the respective part is addressed

- Krugman points out that there is no well defined bottom-line for countries such as bankruptcy for companies.
  However, we have experienced economic crises like the Argentinean one in 2001, which led to a situation, which could be regarded as a bankruptcy. Do you think, Krugman is still right?
  On the other hand, we may have countries, which are not bankrupt and may even have comparative advantages such as natural resources (diamonds etc.) but have still failed as a state - Sudan might be an example. Are those countries competitive?

- Krugman states also, that the major economic nations of the world are not in economic competition with each other.
  Do you agree with this statement? Is it still only a rivalry for status? Are there examples of a win-lose competition versus the win-win situation Smith, Ricardo and Heckscher-Ohlin presented as core of their theorems?
• Krugman underlines the danger that competitiveness could lead to protectionism and trade wars. People might discuss competitiveness as an excuse for economic nationalism (blame all problems on foreigners and retreat into protectionism), if a country seems not to be winning the “global trade game”.

Discussion on the consequences of Business Process Offshore Outsourcing (BPOO) and the reaction of the press and governments to the threat BPOO represents for domestic employment (see Articles). Students could be split into two groups defending respectively pros and cons of BPOO.

Review questions to test comprehension of the content of the Module:

1. What are the goals of competitiveness at the different levels?
2. Name and explain the major points of Krugman’s critique concerning competitiveness of nations.
3. What is meant by long-term versus short-term perspective of competitiveness?
4. Did competitiveness replace the concept of comparative advantage?
5. How did globalisation affect competitiveness?
6. Does competitiveness necessarily lead to development?

Articles on Business Process Offshore Outsourcing for last discussion question

Article A) The Outsourcing Bogeyman
By Daniel W. Drezner

THE TRUTH IS OFFSHORE

When a presidential election year coincides with an uncertain economy, campaigning politicians invariably invoke an international economic issue as a dire threat to the well-being of Americans. Speechwriters denounce the chosen scapegoat, the media provides blanket coverage of the alleged threat, and legislators scurry to introduce supposed remedies.

The cause of this year’s commotion is offshore outsourcing -- the alleged migration of American jobs overseas. The depth of alarm was strikingly illustrated by the firestorm of reaction to recent testimony by N. Gregory Mankiw, the head of President George W. Bush's Council of Economic Advisers. No economist really disputed Mankiw’s observation that "outsourcing is just a new way of doing international trade," which makes it "a good thing." But in the political arena, Mankiw’s comments sparked a furor on both sides of the aisle. Democratic presidential candidate John Kerry accused the Bush administration of wanting "to export more of our jobs overseas," and Senate Minority Leader Tom Daschle quipped, "If this is the administration's position, I think they owe an apology to every worker in America." Speaker of the House Dennis Hastert, meanwhile, warned that "outsourcing can be a problem for American workers and the American economy."

Critics charge that the information revolution (especially the Internet) has accelerated the decimation of U.S. manufacturing and facilitated the outsourcing of service-sector jobs once considered safe, from backroom call centers to high-level software programming. (This concern feeds into the suspicion that U.S. corporations are exploiting globalization to fatten profits at the expense of workers.) They are right that offshore outsourcing deserves attention and that some measures to assist affected workers are called for. But if their exaggerated alarmism succeeds in provoking protectionist responses from lawmakers, it will do far more harm than good, to the U.S. economy and to American workers.

Should Americans be concerned about the economic effects of outsourcing? Not particularly. Most of the numbers thrown around are vague, overhyped estimates. What hard data exist suggest that gross
job losses due to offshore outsourcing have been minimal when compared to the size of the entire U.S. economy. The outsourcing phenomenon has shown that globalization can affect white-collar professions, heretofore immune to foreign competition, in the same way that it has affected manufacturing jobs for years. But Mankiw’s statements on outsourcing are absolutely correct; the law of comparative advantage does not stop working just because 401(k) plans are involved. The creation of new jobs overseas will eventually lead to more jobs and higher incomes in the United States. Because the economy -- and especially job growth -- is sluggish at the moment, commentators are attempting to draw a connection between offshore outsourcing and high unemployment. But believing that offshore outsourcing causes unemployment is the economic equivalent of believing that the sun revolves around the earth: intuitively compelling but clearly wrong.

Should Americans be concerned about the political backlash to outsourcing? Absolutely. Anecdotes of workers affected by outsourcing are politically powerful, and demands for government protection always increase during economic slowdowns. The short-term political appeal of protectionism is undeniable. Scapegoating foreigners for domestic business cycles is smart politics, and protecting domestic markets gives leaders the appearance of taking direct, decisive action on the economy.

Protectionism would not solve the U.S. economy’s employment problems, although it would succeed in providing massive subsidies to well-organized interest groups. In open markets, greater competition spurs the reallocation of labor and capital to more profitable sectors of the economy. The benefits of such free trade -- to both consumers and producers -- are significant. Cushioning this process for displaced workers makes sense. Resorting to protectionism to halt the process, however, is a recipe for decline. An open economy leads to concentrated costs (and diffuse benefits) in the short term and significant benefits in the long term. Protectionism generates pain in both the short term and the long term.

THE SKY IS FALLING

Outsourcing occurs when a firm subcontracts a business function to an outside supplier. This practice has been common within the U.S. economy for some time. (Witness the rise of large call centers in the rural Midwest.) The reduction of communication costs and the standardization of software packages have now made it possible to outsource business functions such as customer service, telemarketing, and document management. Other affected professions include medical transcription, tax preparation, and financial services.

The numbers that are bandied about on offshore outsourcing sound ominous. The McKinsey Global Institute estimates that the volume of offshore outsourcing will increase by 30 to 40 percent a year for the next five years. Forrester Research estimates that 3.3 million white-collar jobs will move overseas by 2015. According to projections, the hardest hit sectors will be financial services and information technology (IT). In one May 2003 survey of chief information officers, 68 percent of IT executives said that their offshore contracts would grow in the subsequent year. The Gartner research firm has estimated that by the end of this year, 1 out of every 10 IT jobs will be outsourced overseas. Deloitte Research predicts the outsourcing of 2 million financial-sector jobs by 2009.

At first glance, current macroeconomic indicators seem to support the suspicion that outsourcing is destroying jobs in the United States. The past two years have witnessed moderate growth and astonishing productivity gains, but overall job growth has been anemic. The total number of manufacturing jobs has declined for 43 consecutive months. Surely, many observers insist, this must be because the jobs created by the U.S. recovery are going to other countries. Morgan Stanley analyst Stephen Roach, for example, has pointed out that “this is the first business cycle since the advent of the Internet -- the enabler of a new real-time connectivity to low-cost offshore labor pools.” He adds, "I don't think it's a coincidence that this jobless recovery has occurred in such an environment." Those who agree draw on anecdotal evidence to support this assertion. CNN's Lou Dobbs routinely harangues U.S. companies engaged in offshore outsourcing in his "Exporting America" series.

Many IT executives have themselves contributed to this perception. When IBM announced plans to outsource 3,000 jobs overseas this year, one of its executives said, "[Globalization] means shifting a lot of jobs, opening a lot of locations in places we had never dreamt of before, going where there's
low-cost labor, low-cost competition, shifting jobs offshore." Nandan Nilekani, the chief executive of the India-based Infosys Technologies, said at this year's World Economic Forum, "Everything you can send down a wire is up for grabs." In January testimony before Congress, Hewlett-Packard chief Carly Fiorina warned that "there is no job that is America's God-given right anymore."

That last statement chills the blood of most Americans. Few support the cause of free trade for its own sake, out of pure principle. The logic underlying an open economy is that if the economy sheds jobs in uncompetitive sectors, employment in competitive sectors will grow. If hi-tech industries are no longer competitive, where will new jobs be created?

INSIDE THE NUMBERS

Before answering that question, Americans need to separate fact from fiction. The predictions of job losses in the millions are driving the current outsourcing hysteria. But it is crucial to note that these predictions are of gross, not net, losses. During the 1990s, offshore outsourcing was not uncommon. (American Express, for one, set up back-office operations in India more than a decade ago.) But no one much cared because the number of jobs leaving U.S. shores was far lower than the number of jobs created in the U.S. economy.

Similarly, most current predictions are not as ominous as they first sound once the numbers are unpacked. Most jobs will remain unaffected altogether: close to 90 percent of jobs in the United States require geographic proximity. Such jobs include everything from retail and restaurants to marketing and personal care -- services that have to be produced and consumed locally, so outsourcing them overseas is not an option. There is also no evidence that jobs in the high-value-added sector are migrating overseas. One thing that has made offshore outsourcing possible is the standardization of such business tasks as data entry, accounting, and IT support. The parts of production that are more complex, interactive, or innovative -- including, but not limited to, marketing, research, and development -- are much more difficult to shift abroad. As an International Data Corporation analysis on trends in IT services concluded, "the activities that will migrate offshore are predominantly those that can be viewed as requiring low skill since process and repeatability are key underpinnings of the work. Innovation and deep business expertise will continue to be delivered predominantly onshore." Not coincidentally, these are also the tasks that generate high wages and large profits and drive the U.S. economy.

As for the jobs that can be sent offshore, even if the most dire-sounding forecasts come true, the impact on the economy will be negligible. The Forrester prediction of 3.3 million lost jobs, for example, is spread across 15 years. That would mean 220,000 jobs displaced per year by offshore outsourcing -- a number that sounds impressive until one considers that total employment in the United States is roughly 130 million, and that about 22 million new jobs are expected to be added between now and 2010. Annually, outsourcing would affect less than .2 percent of employed Americans.

There is also reason to believe that the unemployment caused by outsourcing will be lower than expected. Gartner assumed that more than 60 percent of financial-sector employees directly affected by outsourcing would be let go by their employers. But Boston University Professor Nitin Joglekar has examined the effect of outsourcing on large financial firms and found that less than 20 percent of workers affected by outsourcing lose their jobs; the rest are repositioned within the firm. Even if the most negative projections prove to be correct, then, gross job loss would be relatively small.

Moreover, it is debatable whether actual levels of outsourcing will ever match current predictions. Despite claims that the pace of onshore and offshore outsourcing would quicken over time, there was no increase in 2003. In fact, TPI Inc., an outsourcing advisory firm, even reports that the total value of business process outsourcing deals in the United States fell by 32 percent in 2003.

There is no denying that the number of manufacturing jobs has fallen dramatically in recent years, but this has very little do with outsourcing and almost everything to do with technological innovation. As with agriculture a century ago, productivity gains have outstripped demand, so fewer and fewer workers are needed for manufacturing. If outsourcing were in fact the chief cause of manufacturing...
losses, one would expect corresponding increases in manufacturing employment in developing countries. An Alliance Capital Management study of global manufacturing trends from 1995 to 2002, however, shows that this was not the case: the United States saw an 11 percent decrease in manufacturing employment over the course of those seven years; meanwhile, China saw a 15 percent decrease and Brazil a 20 percent decrease. Globally, the figure for manufacturing jobs lost was identical to the U.S. figure -- 11 percent. The fact that global manufacturing output increased by 30 percent in that same period confirms that technology, not trade, is the primary cause for the decrease in factory jobs. A recent analysis of employment data from U.S. multinational corporations by the U.S. Department of Commerce reached the same conclusion.

What about the service sector? Again, the data contradict the popular belief that U.S. jobs are being lost to foreign countries without anything to replace them. In the case of many low-level technology jobs, the phenomenon has been somewhat exaggerated. For example, a Datamonitor study found that global call-center operations are being outsourced at a slower rate than previously thought -- only five percent are expected to be located offshore by 2007. Dell and Lehman Brothers recently moved some of their call centers back to the United States from India because of customer complaints. And done properly, the offshore outsourcing of call centers creates new jobs at home. Delta Airlines outsourced 1,000 call-center jobs to India in 2003, but the $25 million in savings allowed the firm to add 1,200 reservation and sales positions in the United States.

Offshore outsourcing is similarly counterbalanced by job creation in the high-end service sector. An Institute for International Economics analysis of Bureau of Labor Statistics employment data revealed that the number of jobs in service sectors where outsourcing is likely actually increased, even though total employment decreased by 1.7 percent. According to the Bureau of Labor Statistics "Occupation Outlook Handbook," the number of IT-related jobs is expected to grow 43 percent by 2010. The case of IBM reinforces this lesson: although critics highlight the offshore outsourcing of 3,000 IT jobs, they fail to mention the company's plans to add 4,500 positions to its U.S. payroll. Large software companies such as Microsoft and Oracle have simultaneously increased outsourcing and domestic payrolls.

How can these figures fit with the widespread perception that IT jobs have left the United States? Too often, comparisons are made to 2000, an unusual year for the technology sector because Y2K fears and the height of the dot-com bubble had pushed employment figures to an artificially high level. When 1999 is used as the starting point, it becomes clear that offshore outsourcing has not caused a collapse in IT hiring. Between 1999 and 2003, the number of jobs in business and financial operations increased by 14 percent. Employment in computer and mathematical positions increased by 6 percent.

It is also worth remembering that many predictions come from management consultants who are eager to push the latest business fad. Many of these consulting firms are themselves reaping commissions from outsourcing contracts. Much of the perceived boom in outsourcing stems from companies' eagerness to latch onto the latest management trends; like Dell and Lehman, many will partially reverse course once the hidden costs of offshore outsourcing become apparent.

If offshore outsourcing is not the cause of sluggish job growth, what is? A study by the Federal Reserve Bank of New York suggests that the economy is undergoing a structural transformation: jobs are disappearing from old sectors (such as manufacturing) and being created in new ones (such as mortgage brokering). In all such transformations, the creation of new jobs lags behind the destruction of old ones. In other words, the recent recession and current recovery are a more extreme version of the downturn and "jobless recovery" of the early 1990s -- which eventually produced the longest economic expansion of the post-World War II era. Once the structural adjustments of the current period are complete, job growth is expected to be robust. (And indeed, current indicators are encouraging: there has been a net increase in payroll jobs and in small business employment since 2003 and a spike in IT entrepreneurial activity.)

Offshore outsourcing is undoubtedly taking place, and it will likely increase over the next decade. However, it is not the tsunami that many claim. Its effect on the U.S. economy has been exaggerated, and its effect on the U.S. employment situation has been grossly exaggerated.

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THE UPSIDE OF OUTSOURCING

To date, the media's coverage of outsourcing has focused on its perceived costs. This leaves out more than half of the story. The benefits of offshore outsourcing should not be dismissed.

The standard case for free trade holds that countries are best off when they focus on sectors in which they have a comparative advantage -- that is, sectors that have the lowest opportunity costs of production. Allowing countries to specialize accordingly increases productivity across all countries. This specialization translates into cheaper goods, and a greater variety of them, for all consumers.

The current trend of outsourcing business processes overseas is comparative advantage at work. The main driver of productivity gains over the past decade has been the spread of information technology across the economy. The commodification of simple business services allows those benefits to spread further, making growth even greater.

The data affirm this benefit. Catherine Mann of the Institute for International Economics conservatively estimates that the globalization of IT production has boosted U.S. GDP by $230 billion over the past seven years; the globalization of IT services should lead to a similar increase. As the price of IT services declines, sectors that have yet to exploit them to their fullest -- such as construction and health care -- will begin to do so, thus lowering their cost of production and improving the quality of their output. (For example, cheaper IT could one day save lives by reducing the number of "adverse drug events." Mann estimates that adding bar codes to prescription drugs and instituting an electronic medical record system could reduce the annual number of such events by more than 80,000 in the United States alone.)

McKinsey Global Institute has estimated that for every dollar spent on outsourcing to India, the United States reaps between $1.12 and $1.14 in benefits. Thanks to outsourcing, U.S. firms save money and become more profitable, benefiting shareholders and increasing returns on investment. Foreign facilities boost demand for U.S. products, such as computers and telecommunications equipment, necessary for their outsourced function. And U.S. labor can be reallocated to more competitive, better-paying jobs; for example, although 70,000 computer programmers lost their jobs between 1999 and 2003, more than 115,000 computer software engineers found higher-paying jobs during that same period. Outsourcing thus enhances the competitiveness of the U.S. service sector (which accounts for 30 percent of the total value of U.S. exports). Contrary to the belief that the United States is importing massive amounts of services from low-wage countries, in 2002 it ran a $64.8 billion surplus in services.

Outsourcing also has considerable noneconomic benefits. It is clearly in the interest of the United States to reward other countries for reducing their barriers to trade and investment. Some of the countries where U.S. firms have set up outsourcing operations -- including India, Poland, and the Philippines -- are vital allies in the war on terrorism. Just as the North American Free Trade Agreement (NAFTA) helped Mexico deepen its democratic transition and strengthen its rule of law, the United States gains considerably from the political reorientation spurred by economic growth and interdependence.

Finally, the benefits of "insourcing" should not be overlooked. Just as U.S. firms outsource positions to developing countries, firms in other countries outsource positions to the United States. According to the Bureau of Labor Statistics, the number of outsourced jobs increased from 6.5 million in 1983 to 10 million in 2000. The number of insourced jobs increased even more in the same period, from 2.5 million to 6.5 million.

POLITICAL ECONOMY

When it comes to trade policy, there are two iron laws of politics. The first is that the benefits of trade diffuse across the economy, but the costs of trade are concentrated. Thus, those made worse off by open borders will form the more motivated interest group. The second is that public hostility toward trade increases during economic downturns. When forced to choose between statistical evidence
showing that trade is good for the economy and anecdotal evidence of job losses due to import competition, Americans go with the anecdotes.

Offshore outsourcing adds two additional political pressures. The first stems from the fact that technological innovation has converted what were thought to be non-tradeable sectors into tradeable ones. Manufacturing workers have long been subject to the rigors of global competition. White-collar service-sector workers are being introduced to these pressures for the first time -- and they are not happy about it. As Raghuram Rajan and Luigi Zingales point out in "Saving Capitalism From the Capitalists," globalization and technological innovation affect professions such as law and medicine that have not changed all that much for centuries. Their political reaction to the threat of foreign competition will be fierce.

The second pressure is that the Internet has greatly facilitated political organization, making it much easier for those who blame outsourcing for their troubles to rally together. In recent years, countless organizations -- with names such as Rescue American Jobs, Save U.S. Jobs, and the Coalition for National Sovereignty and Economic Patriotism -- have sprouted up. Such groups have disproportionately focused on white-collar tech workers, even though the manufacturing sector has been much harder hit by the recent economic slowdown.

It should come as no surprise, then, that politicians are scrambling to get ahead of the curve. During the Democratic primary in South Carolina -- a state hit hard by the loss of textile jobs -- billboards asked voters, "Lost your job to free trade or offshore outsourcing yet?" Last Labor Day, President Bush pledged to appoint a manufacturing czar to get to the bottom of the outflow of manufacturing positions. In his stump speech, John Kerry bashes "Benedict Arnold CEOs [who] send American jobs overseas."

Where presidential candidates lead, legislators are sure to follow. Senator Charles Schumer (D-N.Y.) claimed in a January "New York Times" op-ed authored with Paul Craig Roberts that because of increased capital mobility, the law of comparative advantage is now null and void. Senator Tom Daschle (D-S.D.) has observed, "George Bush says the economy is creating jobs. But let me tell you, China is one long commute. And let me tell you, I'm tired of watching jobs shift overseas." Senator Christopher Dodd (D-Conn.) and Representative Nancy Johnson (R-Conn.) are sponsoring the USA Jobs Protection Act to prevent U.S. companies from hiring foreign workers for positions when American workers are available. In February, Senate Democrats announced their intentions to introduce the Jobs for America Act, requiring companies to give public notice three months in advance of any plan to outsource 15 or more jobs. In March, the Senate overwhelmingly approved a measure banning firms from federal contracts if they outsource any of the work overseas. In the past two years, more than 20 state legislatures have introduced bills designed to make various forms of offshore outsourcing illegal.

SPLENDID ISOLATION?

There are clear examples of jobs being sent across U.S. borders because of U.S. trade policy -- but not for the reasons that critics of outsourcing believe. Consider the example of candy-cane manufacturers: despite the fact that 90 percent of the world's candy canes are consumed in the United States, manufacturers have sent much of their production south of the border in the past five years. The attraction of moving abroad, however, has little to do with low wages and much to do with protectionism. U.S. quotas on sugar imports have, in recent years, caused the domestic price of sugar to become 350 percent higher than world market prices. As candy makers have relocated production to countries where sugar is cheaper, between 7,500 and 10,000 workers in the Midwest have lost their jobs -- victims not of outsourcing but of the kind of protectionism called for by outsourcing's critics.

A similar story can be told of the steel tariffs that the Bush administration foolishly imposed from March 2002 until December 2003 (when a ruling by the World Trade Organization prompted their cancellation). The tariffs were allegedly meant to protect steelworkers. But in the United States, steel users employ roughly 40 times more people than do steel producers. Thus, according to estimates by
the Institute for International Economics, between 45,000 and 75,000 jobs were lost because higher steel prices made U.S. steel-using industries less competitive.

These examples illustrate the problem with relying on anecdotes when debating the effects of offshore outsourcing. Anecdotes are incomplete narratives that fail to capture opportunity costs. In the cases of steel and sugar, the opportunity cost of using protectionism to save jobs was the much larger number of jobs lost in sectors rendered less productive by higher input prices. Trade protectionism amounts to an inefficient subsidy for uncompetitive sectors of the economy, which leads to higher prices for consumers and a lower rate of return for investors. It preserves jobs in less competitive sectors while destroying current and future jobs in sectors that have a comparative advantage. Thus, if barriers are erected to prevent offshore outsourcing, the overall effect will not be to create jobs but to destroy them.

So if protectionism is not the answer, what is the correct response? The best piece of advice is also the most difficult for elected officials to follow: do no harm. Politicians never get credit for inaction, even when inaction is the best policy. President George H.W. Bush, for example, was pilloried for refusing to follow Japan's lead by protecting domestic markets -- even though his refusal helped pave the way for the 1990s boom by letting market forces allocate resources to industries at the technological frontier. Restraint is anathema to the political class, but it is still the most important response to the furor over offshore outsourcing. As Robert McTeer, president of the Federal Reserve Bank of Dallas, said when asked about policy responses to outsourcing, "If we are lucky, we can get through the year without doing something really, really stupid."

The problem of offshore outsourcing is less one of economics than of psychology -- people feel that their jobs are threatened. The best way to help those actually affected, and to calm the nerves of those who fear that they will be, is to expand the criteria under which the Trade Adjustment Assistance (TAA) program applies to displaced workers. Currently, workers cannot apply for TAA unless overall sales or production in their sector declines. In the case of offshore outsourcing, however, productivity increases allow for increased production and sales -- making TAA out of reach for those affected by it. It makes sense to rework TAA rules to take into account workers displaced by offshore outsourcing even when their former industries or firms maintain robust levels of production.

Another option would be to help firms purchase targeted insurance policies to offset the transition costs to workers directly affected by offshore outsourcing. Because the perception of possible unemployment is considerably greater than the actual likelihood of losing a job, insurance programs would impose a very small cost on firms while relieving a great deal of employee anxiety. McKinsey Global Institute estimates that such a scheme could be created for as little as four or five cents per dollar saved from offshore outsourcing. IBM recently announced the creation of a two-year, $25 million retraining fund for its employees who fear job losses from outsourcing. Having the private sector handle the problem without extensive government intervention would be an added bonus.

THE BEST DEFENSE

Until robust job growth returns, the debate over outsourcing will not go away -- the political temptation to scapegoat foreigners is simply too great.

The refrain of "this time, it's different" is not new in the debate over free trade. In the 1980s, the Japanese variety of capitalism -- with its omniscient industrial policy and high nontariff barriers -- was supposed to supplant the U.S. system. Fifteen years later, that prediction sounds absurd. During the 1990s, the passage of NAFTA and the Uruguay Round of trade talks were supposed to create a "giant sucking sound" as jobs left the United States. Contrary to such fears, tens of millions of new jobs were created. Once the economy improves, the political hysteria over outsourcing will also disappear.

It is easy to praise economic globalization during boom times; the challenge, however, is to defend it during the lean years of a business cycle. Offshore outsourcing is not the boogeyman that critics say it is. Their arguments, however, must be persistently refuted. Otherwise, the results will be disastrous: less growth, lower incomes -- and fewer jobs for American workers.

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Are American workers at risk of losing their jobs? Damn right they are. Particularly if they pursued what they thought were safe jobs in today's commerce. When American workers lost their blue-collar jobs they stepped up to the plate and educated themselves in the technologies that they were told would assure them security. Sadly, corporate America lied. Not only are American workers losing their coveted jobs, but in unprecedented moves they are being asked to train their replacements.

The consequences are mortifying.

By now, most of us have experienced calling an organization we have done business with before only to find the overtly sweet voice on the other end of the receiver has a thick, almost unintelligible foreign accent.

Well, folks, get used to it.

By the thousands jobs are being exported, or the new word, outsourced to India, Hong Kong, The Peoples Republic of China, Panama, Manila, The Philippines; and many other countries where the local citizens speak English. Jobs are moving offshore to any country where the populace is accustomed to working for pennies a day. Any sum above a dollar in many cases, is the beginning to middle-class wealth and a vast change of lifestyle.

Are you wondering how to safeguard yourself? It's not very promising, but here's the scoop. All manufacturing careers are going overseas. It's as simple and as appalling as that.

Since 1986, 15 million high-paying manufacturing jobs have left the US and American workers. Need a second to take absorb that? It's startling, I know. But the horrifying truth is, sooner than you think, not a single automobile, airplane, or ship will be assembled or manufactured in the land of free, home of the brave. It won't be long thereafter, that all manufacturers wanting to stay competitive will seek to bring their businesses to the millions of workers overseas. After all, they are willing to work for a pittance without the contrivance or interference of nasty unions, health benefits, 401K's, and the multitude of perks the American worker has worked hard to achieve.

Be on notice, American workers. If your job can be performed as well elsewhere, you are in grave danger of losing your jobs. If your job relies on computer skills, telephone skills, manufacturing...your days are numbered. Any job that can be performed in another location, preferably outside of the realm of American wages and American work-related laws, are going.

If you're a nurse or a physician, a medical technician, a physical therapist, even a nurse's aide, you're safe...at least for the time being. But if you're an x-ray technician, watch out. According to Irwin Kellner, a professor of economics at Hofstra University in New York, already many films are transmitted via the Internet and read abroad. Kellner also says, however, that "We will manage not only to muddle through but to create jobs to add to our overall well-being." He also says he has. "...faith in the system. Somehow or another, we'll create jobs that can't be exported overseas."

Other experts in the field are not quite so idealistic. Diane Morello, Research Director and VP at Gartner, Inc., estimates that "based on her preliminary calculations, at least 500,000 jobs will be lost to offshore outsourcing by the end of 2004." Her company report also dimly states, "one out of 10 jobs in the US computer services and software sector could move overseas by the end of next year". Furthermore, the study indicates that "while professionals in the computer industry will be especially hard-hit, IT jobs in other sectors such as banking, health-care, and insurance will also feel the impact, with one in 20 being exported to emerging markets such as Russia, India, or other countries in Southeast Asia.

According to the Washington Post, 2.5 million factory jobs have disappeared since 2001.
If you're a draftsman, an architect, a computer programmer, a graphic designer, your days are numbered. If you're a plumber, electrician, construction worker, contractor, bricklayer, you're secure for now.

A young software executive states, “He's allowed to hire whomever he wants--as long as they live in India or Australia. Another American executive says, “We've got one company that's closing a support facility here to move it to Asia, and another that doesn't even try to fill jobs at home. There's something vaguely unpatriotic about all this. Especially when the jobs are answering the phone to talk to American customers or developing programs to be sold primarily to American companies.”

Stuart Yasgur and Ernie Nounou wrote in Business Week that, “Common knowledge says that we are in the midst of a 'Jobless Recovery.' After all, while the United States economy recovered statistically from the 'mild' recession in 2001, unemployment has risen from 4% to 6%-- a whopping 50% increase. Urban centers like New York City, which had a January unemployment rate of 8.6%, have been particularly hard hit. What is not commonly known, however, is that jobs have been created during this recovery, just not in places like New York City, San Francisco, or even Flint, Michigan. Jobs have been created in places like India, Jamaica, the Philippines, and even Sri Lanka. The National Association of Software and Service Companies (Nasscom), an association of software and IT-enabled services companies, estimates that India's IT-enabled services industry grew by 70% during 2001-2002."

So, dear reader, if you find yourself maddened by the inarticulate, difficult to understand techie on the telephone, perhaps it's time we made our voices heard. If you pick up your telephone and dial an out-of-state number and the voice on the other end of the telephone is speaking in an almost unintelligible accent from India or some other foreign country, you can rest assured your phone call was re-directed outside of the United States.

Corporate America is sending our jobs and the jobs of our fellow Americans abroad to foreign countries so that the company that is multi-billions of dollars wealthy can save money by farming its work outside of America and far from American workers. I don't know about you, but I'm mad as hell and I don't want to take it anymore.

The very companies we made rich by buying their products, their computers, their software, their clothing, their kitchen gadgets, their televisions -- are thanking us by taking the jobs of our citizens and moving them, excuse me, outsourcing them, to countries and a workforce far from our shores. They're doing this for one reason and one reason only: The Almighty Dollar. It's despicable.

If we don't do something and do something quick, it's going to be too late. Our lifestyle and our wealth will cease to exist, as we know it. The wealthy few will be the corporate entities that outsourced their workforce.

After Shirley Turner, a Democratic state senator from New Jersey discovered that a program from her state, Families First, which provides welfare recipients with grocery debit cards had been outsourced to Mumbai, India, she proposed bill No. 1349. Her bill, which was approved unanimously by the New Jersey Senate in December 2002, would require all state contracts to be performed by either US citizens or foreign citizens who work legally in the United States.

Following her lead, Connecticut, Maryland, Missouri, and Wisconsin all have similar bills under consideration. However, folks, this is a very small pebble making tiny ripples. It is time we stepped up to the plate.

We need to revolt. We need to get mad as hell and unwilling to take this anymore. Not just because corporate America is a lethal indignity; not just because truth in advertising is a lie; not just because American jobs are being shipped out of the country. We need to realize we are the power, we can make this a better world, a better place in which to raise the next generation. We can start here and now and tell Bill Gates' Microsoft, the McAfee's and Norton's, The Gateway's, the Dell's, our telephone companies, and insurance companies, and our Internet providers that if they want our business, they
are going to have to earn it...and they're going to have to keep on earning it. It's time folks to become mad as hell and not take it anymore.

We need to boycott products that are outsourced. We need to write letters to our representatives and our local newspapers. We need to make our voices heard. We need to parade in front of corporate offices and hold banners high and shout out loud "We are mad as hell and we are not going to take this anymore!" We need to write to the CEO's and write them again and tell them how we feel. But first and foremost, we need to stop buying their products and their services.

Finally, we need to safeguard ourselves by becoming re-educated and prepared for the possibility that we may need to fit into a new workforce.
References Module 1


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Training Material on Competitiveness and Development

MODULE 2: APPROACHES TO COMPETITIVENESS

In this module, we will look at different theories regarding the competitiveness of nations. Some of them are holistic in their approach, while others will follow a narrower view. In order to understand how the idea of competitiveness can be applied and in order to unpack what is meant when countries are described as competitive, it is important to understand the theories, approaches, and their underlying assumptions, that have been used. Understanding these different approaches will give you the necessary tools to apply them critically when you want to analyse a country’s competitiveness.

Firstly we will look at Michael Porter's approach, based on industry competitiveness and promoted through consultancy projects and the Global Competitiveness Report of the World Economic Forum. Then we will go on to examine briefly two other well-known proponents of competitiveness, the International Institute of Management Development, which publishes the World Competitiveness Yearbook, and the OECD, which was one of the first international organizations that integrated competitiveness analysis widely in both research work and policy recommendations. We will then analyse the "systemic approach" to competitiveness. With each of these different approaches we will see if and to what degree they are relevant for developing countries and the goal of development.

While the focus will be on competitiveness of nations, we will see that nations are made up of a number of different actors with different interests, such as governments, civil society organisations, individuals, and, importantly, in the case of economic competitiveness, industries and enterprises. Therefore, some models approach the study of nations by looking at companies and industries so as to draw conclusions on the competitive situation of the country.

This module will help you to understand why and how particular determinants of competitiveness are selected by different approaches.

1. Porter's theory of the competitive advantage of nations

Porter's theory is without any doubt one of the most influential ones. The World Economic Forum based its competitiveness ranking, the Global Competitiveness Report, on his approach, which is broadly used by policy makers and often quoted by the press. His theory also has influence in the academic world, since the Institute for Strategy and Competitiveness, based at Harvard Business School, offers Porter's courses within a franchise system and models such as the value chain, the Five Forces or the Diamond have become a standard ingredient of management tools.

1.1. From the competitive advantage of companies and industries to the competitive advantage of nations

Porter started studying the phenomenon of competitiveness at company and industry level. He became interested in the subject of national competitiveness around 1985, when he was appointed to
participate in President Reagan's commission on Industrial Competitiveness, which was created in order to propose policy actions and maintain the U.S. competitive position against Japan and the Asian Tigers. His background in company and industry analysis clearly shaped Porter's view of the competitiveness of nations. According to him, the principles of competitive strategy in individual industries decide on the competitiveness on a national level. His starting point of analysis is the micro-level, and then he builds then up to the economy as a whole. Porter assumes that it is in a particular industry, such as passenger cars, facsimile machines etc., where competitive advantage is won or lost. Put crudely, if a nation has competitive industries, then the nation is competitive. The link between competitive industries and the national level is described as follows:

"The home nation influences the ability of its firms to succeed in particular industries. The outcome of thousands of struggles in individual industries determines the state of the nation's economy and its ability to progress...", but "...firms, not nations, compete in international markets."

The questions which dominate Porter's analysis, are: "Why is one nation often the home for many of an industry's world leaders? ... For example: Why is Switzerland the home base for pharmaceuticals, chocolate, trading? ... And why are leaders in heavy trucks and mining equipment based in Sweden?"

According to Porter, in order to understand national competitiveness, it is essential to know why specific industries or even segments of industries, which are highly successful at international level, are often located in the same country or even the same region.

Similar to the definitions we analysed in the first module, Porter sees high and rising living standards as the principal economic goal of a nation. In order to achieve this objective, he argues that a nation needs to productively employ its resources (labour and capital):

"Productivity is the value of the output produced by unit of labour or capital. It depends on both the quality and features of products (which determine the prices they can command) and the efficiency with which they are produced." Porter 1990, p.6

Porter comes to the conclusion, that the only meaningful concept of competitiveness at the national level is national productivity. His analysis of competitiveness focuses therefore on productivity and aims at understanding why in one country firms were able to build up the capacity to achieve high levels of productivity and to increase them over time and in another country not. The basic condition of analysing competitiveness is to understand the determinants of productivity and the rate of productivity growth. Since productivity is created at the industry and company level, Porter argues that we must focus on specific industries and industry segments to understand competitiveness. At this level, the objective would be to examine what meaningful and commercially valuable skills and technology are created and how.

When Porter examines national competitiveness he is concerned with the international level. For example he looks at how countries compete with each other through their exports and the location of company activities abroad, and pays less attention to the analysis of the evolution, national history and aspirations regarding competitiveness. His goal is to explain why firms in one nation and out of one particular industry are successfully competing against foreign rivals, for example why Japanese small cars consistently outperform similar cars made in the US. For Porter, successful competition with foreign rivals implies finding out which industries offer best chances to maintain high levels of productivity and even raise them over the time.

The next question, then, is how to achieve a competitive industry. For Porter, as with most economists, it is a question of specialization. He states that competition at international level and
increased trade lead to a strong specialization in a narrowly defined industry segment with the objective to maintain and expand the competitive position of the nation.

However it is not enough to pursue a specialization strategy based on comparative advantages following the theories of Ricardo and Heckscher-Ohlin that is, a strategy based on the respective factor-endowment of a national economy. For Porter, this view is flawed because:

- Most of world trade takes place between advanced industrial nations with similar factor endowments
- The existence of intra-firm trade between different subsidiaries of Multi National Corporations (MNCs)
- Cases like Korea that managed to achieve quite high rates of exports in capital-intensive industries, such as steel or shipbuilding at a point in time (after the Korean War) when it did not have any capital available domestically

According to this approach, then we need to look at specialization at industry-level and not at national level, in order to find out, where the competitive advantage of industries lies. Moreover, we cannot limit the analysis of competitiveness to the firm level, since isolated cases of successful companies would not explain how national industries could hold their position over decades or centuries. However, successful national industries are mostly composed by groups of firms, and those are often even located in the same city or region. For that reason we will start by examining the position and strategy of companies within industries.

1.2 The Five Forces - a structural analysis of industries

So, how do we explain what makes an industry competitive? Porter identifies five forces, which determine the competitive position of an industry (threat of new entrants, threat of substitute products or services, bargaining power of suppliers, bargaining power of buyers and rivalry between existing competitors), whereby the strength can vary. If an industry is characterized by few pressures from one or several forces, it has good chances to achieve long-term profitability. However, pressures can also be a catalyst in forcing industries toward innovation.

The five forces condition the prices a company can charge, the investment that is needed to compete and the costs it has to bear.
Of course, industries are made up of firms. Each firm is influenced by and influences these industry forces. New entrants can diminish a company's market share. Buyers, if they have enough power, can force companies to lower prices; suppliers can claim a higher profit margin for themselves. Rivalry will increase the costs a company has to spend on R&D, Marketing or after-sales services oblige a company to lower prices. If there are products in the market, which could easily substitute yours, you will have to adapt to their prices and quality.

To qualify the strength of the forces, we have to analyse the structure of the industry, such as the number of buyers and how much those buyers use to spend on a product (bargaining power of buyers) or e.g. the entry barriers, importance of brand loyalty and the existence of economies of scale to know more about the threat of new competitors.

It is important to note, that the industry structure can change over time and that companies themselves should respond to the structure and might even try to influence the five forces through their strategies. Easyjet or Ryanair, for example, managed to significantly change the airline industry. If we look at the importance of industries for the final goal of competitiveness, namely an increase in living standards, we can point out, that structurally attractive industries (high entry barriers, such as technology or specialized skills, low supplier and buyer bargaining power, few substitutes etc.) achieve higher productivity. According to Porter, the objective for a company should therefore be to penetrate structurally attractive industries and for a country to promote these industries. Moreover, a clever company can use structural change to move into new industries. Porter brings the example of Japanese copier companies, who challenged American dominance by focusing on a previously underserved segment (small copiers), using a new way to approach buyers (dealers instead of direct sale), changing the production process (mass production instead of production in batches), and offering a new pricing method (outright sale instead of a rental).

### 1.3 Generic strategies

Within the industry structure, a company has to define its own position in order to achieve a competitive advantage. The Matrix below shows the different possible positions and therefore competitive advantages in one industry.

<table>
<thead>
<tr>
<th>COMPETITIVE SCOPE</th>
<th>COMPETITIVE ADVANTAGE</th>
<th>Lower Cost</th>
<th>Differentiation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broad Target</td>
<td>Cost Leadership</td>
<td></td>
<td>Differentiation</td>
</tr>
<tr>
<td>Narrow Target</td>
<td>Cost Focus</td>
<td></td>
<td>Focused</td>
</tr>
</tbody>
</table>

**Generic Strategies**

Source: Porter (2001), The Competitive Advantage of Nations, p.39

The two basic types of competitive advantage are lower cost or differentiation. If a company chooses the "lower cost" advantage, it has to design, produce and market a comparable product more efficiently than its competitors. In the chocolate industry, Masterfoods (Mars, Snickers, M&Ms, Twix, Balisto etc.) positions itself in this category, whereas the Swiss company Lindt pursues a differentiation strategy with better ingredients, higher prices, using more selected distribution channels. Differentiation means the ability to provide a superior value to the buyer in terms of quality, special features or services.
However, lower costs or differentiation can only lead to a competitive advantage, if the other type of advantage is not totally neglected. A low-cost producer of chocolate of bad quality will lose the competitive advantage, because they will have to lower their prices. Apart from the competitive advantage, a firm has also to decide about its competitive scope, that means the breadth of the firm's target (which product varieties, distribution channels, types of buyers, geographic areas etc.).

Both concepts can be combined and visualized in a Matrix such as the one given above. Each of the generic strategies represents one way of competing within an industry. A company, which tries to pursue all strategies at the same time, or which is located somewhere in the middle of the matrix, will have difficulties in performing successfully.

We should be aware of the fact that Porter is describing ideal scenarios. A tool like the matrix on generic strategies must always be combined with more detailed analysis. However, such a tool can help to visualize and present strategies.

1.4 The Value chain

Within an industry a company has to be productive to be competitive but it also has to create value. Value can be added to the output of a company throughout all functions carried out in a firm - the value chain. A company will gain competitive advantage according to the way it organizes and performs throughout its value chain. The value chain comprises all activities, which are necessary to be able to offer a certain product or service to the buyers. A firm is profitable if the value added throughout each of the distinct activities, exceeds the cost of performing these activities.

The importance of activities can vary depending on the industry and the chosen competitive strategy. In detergents, for example, advertising is very important while manufacturing is less complicated. A firm can achieve competitive advantage within an industry by optimising its value chain, employing new technologies, new inputs, new production procedures etc.

It is important to highlight that there are linkages between the different activities. That means that the performance of one activity affects other activities (if they can be performed at all as well as their cost and effectiveness). Therefore, gaining and maintaining competitive advantages does not only mean being good at individual activities, but also to be able to manage and coordinate the linkages between all the different operations. For example, a company might be very efficient and have excellent process for manufacturing product x, however its logistics are badly organised so that the product x cannot get to fast enough to the shops (time-to-market is too high).
The value chain of one company is normally part of a whole value system, including the value chains of suppliers, wholesalers and retailers etc. so that a company's competitive advantage depends not only on the performance within their own value chain, but also on how well a company manages the whole system. Just-in-Time production, for example, aims at optimising the delivery by suppliers, but coordination and cooperation with suppliers can also include R&D or after-sales services.

The value chain can help to identify both sources of cost advantage (in production, logistics, etc.) and differentiation (e.g. in features of the product, additional services, through a communication strategy).

1.5 Creating and sustaining advantage

A company has analysed its industry structure, looked at the generic company strategies open to it and analysed the value chain to see where its advantages are. Now it needs to create new areas of advantage and stay competitive. Companies can gain competitive advantage because they discover and implement new and better ways of competing - they innovate. Typical causes of innovations that shift competitive advantage are new technologies, new or shifting buyer needs (e.g. fast-food instead of traditional restaurants), the emergence of a new industry segment, changed input costs or availability (e.g. oil prices, relative labour cost) and changes in government regulations (e.g. product standards).

For a competitive advantage to be sustainable depends on three conditions:

- The source of the advantage: some advantages (so called lower-order advantages such as low labour costs) can be relatively easily imitated by competitors, while higher-order advantages such as proprietary technology or brand reputation, which often require advanced skills such as highly trained personnel and internal technical capability, are more durable.

- Number of distinct sources of advantage a company possesses: one or few advantages are more likely to be nullified by competitors.

- Ability to improve and upgrade constantly: since almost all advantages can be imitated sooner or later, a firm has too upgrade creating new advantages. In this process, old advantages may have to be abandoned. The key problem here is that organizations cannot easily overcome a past strategy that is often rooted in the organizational structure and even the culture. Upgrading means change and this can be perceived as a threat for predictability and stability.

1.6 The competitiveness diamond - determinants of national competitive advantage

In his competitiveness diamond Porter extends his analysis to look at broader national conditions that can influence the competitive advantage of an industry. Porter looks at what conditions a specific country, e.g. Germany can offer a specific industry (or industry segment), e.g. beer or beer bottling. If Germany is competitive in beer it is because it has a competitive beer industry not that it is a competitive nation, per se. Again, we can see that Porter's starting point of analysis, even when he is talking about the competitiveness of nations, is the industry.

The diamond attempts to understand competitiveness of nations through analysing four main determinants as they apply to the national or regional level.

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2 In Porter, region applies to geographical areas that contain related and supporting industries, both within a nation state and across national borders.

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- **Factor conditions**: The nation's position in factors of production, such as skilled labour or infrastructure, necessary to compete in a given industry
- **Demand conditions**: The nature of home demand for the industry's product or service.
- Presence of **related and supporting industries**: presence or absence of supplier or related industries which are internationally competitive.
- **Firm strategy, structure and rivalry**: how companies are created, organized, and managed, and the nature of domestic rivalry.

*Factor conditions*

Factor conditions refers to inputs used as factors of production, such as labour, land, natural resources, capital and infrastructure. These might sound very similar to those described in neoclassical economic theory, but Porter argues that the key factors, those that define the specialization strategy of a country, are created and not inherited. Factor-creating mechanisms, which are even more important than the current factor pool, since they enable long-term competitive advantages, include educational institutions, apprenticeships programmes, research institutes, bodies providing infrastructure such as government-owned port authorities. The key factors would be skilled labour, knowledge resources (a nation’s scientific, technical and market knowledge), capital and infrastructure (higher-order factors).

Porter argues that the key for high productivity is to involve complex technology and employ highly skilled human resources.

How efficiently and effectively and where (in which industries) those factors are deployed is the crucial point.

*The Competitiveness Diamond (including Chance and Government as additional determinants)*

*Source: Porter (2001), The Competitive Advantage of Nations, p.127*

Those factors, which are not “key”, such as unskilled labour and raw materials can be relatively easily obtained by competitors and would not create a long-term competitive advantage. As we have seen in
the discussion of the creation of a competitive advantage at firm-level, it is much more difficult to imitate and duplicate higher-order factors, since they normally involve sustained investment. What might be surprising at the first sight is the following: Porter argues, that a lack of resources can even help countries to become competitive (the so called “selective factor disadvantage”). His explanation is that abundance can lead to waste whereas scarcity can serve as a driver for innovation. Countries, which face a lack of resources, are forced to innovate to overcome that problem. One example would be Switzerland, which concentrated on innovative and high-end watches, when labour shortages forced them to abandon labour-intensive production. Japan, with its high priced land would be another example. Factory space is very expensive, a fact that probably contributed to the invention of just-in-time inventory techniques.

**Demand conditions**

According to Porter, a sophisticated and demanding domestic market is important to achieving competitiveness. If the market demands high quality, the firm will be obliged to develop and sell superior products. Moreover, the proximity to such customers helps the company to understand better their needs. If consumers in other countries develop similar needs, then the local firms will be also competitive in global markets. An example could be the French Wine industry, pushed towards competitiveness by demanding French consumers.

**Related and supporting industries**

Competitiveness is also conditioned by the existence of suppliers and related industries, often at regional level. The phenomenon of competition (and upstream and/or downstream industries), located in the same area, is known as clustering or agglomeration. Clusters are fundamental in Porter's model, since he assumes that the systemic nature of the diamond promotes the clustering of a nation's competitive industries. They are usually linked through vertical (buyer/supplier) and horizontal (common customers, technology, channels etc.) relationships. In Module 5, we will look in more detail at clusters and their importance for competitiveness. Therefore, we will outline here only some advantages and disadvantages of locating close to competitors. Advantages may be:

- Potential technology knowledge spillovers
- Consumers may associate one region with a certain product and high quality
- Specialized and qualified labour force may also associate this region with a certain kind of industry, so that you will more easily find skilled labour

Disadvantages could be:

- Your skilled employees might leave and join a rival company
- Mark-ups might decrease since competition increases in that region

**Firm strategy, Structure and Rivalry**

Porter points out that competitiveness is influenced by the managerial system, management practices and approaches and that these differ among countries. Although it is unrealistic to expect uniformity across all firms, there are noticeable distinct national patterns of goals, typical strategies and ways of organizing firms. Important national differences can be found in areas such as training and background of leaders, group versus hierarchical style, strength and importance of individual initiatives, tools for decision-making, the nature of the relationship with customers, the attitude toward international activities (and skills, e.g. regarding languages), the relationship between labour and management etc. Aspects such as attitudes toward authority and the generally accepted social norms for individualistic and group behaviour grow out among others of the educational system, social and religious history or the family structures.
Porter discusses differences in individual and company goals across countries. He states that nations will only succeed if the goals and motivations are aligned with the sources of competitive advantage. Ownership structure, capital market conditions and the nature of corporate governance influence the national advantage. They condition the different risk profiles of industries, different investment time horizons and different rates of return. At the individual level, we find differences regarding the reward system (e.g. bonus compensation based on individual performance is typical in the United States). Another dimension would be the relationship between employees and the company. In nations, where frequent job changes are normal, national success may turn towards industries where competitive advantage depends more on the performance of a small group of individuals, such as in the financial services sector or with products based on advanced technology like software.

With regard to rivalry, Porter argues that intense domestic competition enhances innovation and therefore new competitive advantages. Domestic rivals compete not only for market share, but for human resources and technological resources as well.

**The role of:**

*Chance*

Porter defines the chance events as the ones that have little to do with the circumstances in a nation and are largely outside of the control of firms, and often also of nations. Chance events may create forces that reshape the industry structure altering the way the diamond operates and may allow shifts in the competitive position. Examples for chance events are: wars, significant shifts in world financial markets or exchange rates, discontinuities in input costs, such as oil shocks, major technological discontinuities (biotechnology, microelectronics etc.)...

*Government*

Porter argues that governments have an important role within the diamond. However, in his view, this role is to act as an enabler rather than as a distinct fifth determinant. According to Porter, the ideal government should have an indirect influence on creating competitive advantages for industries, trying to reinforce the underlying determinant of competitive advantage:

- Factor conditions can be influenced for example through subsidies, policies toward the capital markets, toward education etc.
- Demand conditions: e.g. local product standards or regulations can be established, which might influence buyer's needs. However, it is more difficult to define the role of governments in this case. Moreover, aggregated demand is influenced by the volume and quality of public demand.

### 1.7 The Dynamics of National Advantage

Porter points out that the single determinants of the diamond constitute a system where they can influence and reinforce each other. Factor conditions, for example, can be influenced by demand conditions regarding the priorities for factor-creating investment, by domestic rivalry, since firms have to invest in factors under pressure not to fall behind, or by the presence of related and supporting industries (existence of cluster with common inputs, skills, and infrastructure will stimulate government, educational institutions and firms to invest in relevant factor-creating mechanisms).

Demand conditions can be shaped by intense rivalry that makes the domestic demand larger and more sophisticated. Related and supporting industries are influenced by the existence of transferable specialized factors and domestic rivalry can change due to new entrants that emerge from related and supporting industries.

It is important to note that in most industries, a nation succeeds because it combines some broadly applicable advantages with advantages that are specific to a particular industry. In facsimile machines,
Japan combined a broadly applicable pool of skills and motivated labour and a generalized advantage in automation and mass production with unique demand conditions (such as a group of established multinationals with a strong need for international communication) and strong positions in some related and supporting industries, such as small motors, cameras, copiers, office automation machines.

### 1.8 Stages of Competitive Development

Having analysed the factors that create national competitiveness (in industries) within a country, Porter's approach then goes on to compare competitive diamonds among nations so as to describe the different stages of industrial development within a nation.

Nations can be analysed based on the stage of competitive development of their industries. Porter identifies four stages that address a nation's position in those industries subject to international competition: factor-driven, investment-driven, innovation-driven and wealth-driven. Although not all those industries will be in the same stage, we can often identify a predominant pattern, reflected in the industries and segments in which a nation's firms can successfully compete.

The first three stages involve normally an upgrading of the competitive advantages, while the fourth stage is one of ultimate decline. Countries do not necessarily have to go through all stages.

In the first stage, competitive advantages are based on basic factors of production (natural resources, abundant and cheap semi-skilled labour pool etc.), not all factors that are presented as a determinant in the diamond. Firms compete on the basis of prices, technology is sourced from other countries and domestic demand is low for exported goods.

![Flowchart of Competitive Development Stages](chart.png)

**ADVANCE**


In this stage, the economy will be vulnerable to global economic cycles and changes in exchange rates, which influence demand and condition relative prices.

Almost all countries have been at the factor-driven stage at a certain point in time. Most developing countries are at this stage and Porter outlines that also prosperous countries like Australia, with many resources, can be classified as factor-driven.

The competitive advantage of the second stage is based on the ability and the willingness of a nation and its industries to invest heavily. Investment in technology is not limited to the application of the technology but also includes improvement. All kinds of production factors are upgraded. But also other determinants of the diamond can contribute to competitive advantages: domestic rivalry is intense and the size and growth of domestic demand can become an advantage. Related and supporting industries are still underdeveloped.

In the innovation-driven stage, all four determinants can be part of a competitive advantage and the interactions between them are strong. Selective factor disadvantages promote innovation and demand sophistication becomes an advantage. Technology and innovative processes are created at home and no longer sourced abroad. At this stage a country is better able to deal with "chance-events", since innovative capability enables to quickly adapt to changes or even to exploit changes to find new competitive advantages.

The last stage leads normally to decline. At this point, the economy is driven by the wealth achieved in the past. Firms can lose competitive advantage due to the fact that the goal has shifted towards...
preserving the current situation instead of enhancing the position, firms are less willing to invest, and rivalry falls. The demand remains static and is focused on present or past wealth related industries.

The analysis of a nation's industries based on the Diamond model should at the last stage lead to the formulation of implications for future company strategies and government policies. We will examine this part in Module 5, which deals with the issue of "competitiveness strategies".

1.9 Conclusion and open questions on Porter's approach to national competitiveness

Porter's theory is without any doubt particularly influential on the competitiveness debate. Most theories have integrated at least some of his ideas. It is important to highlight again two key assumptions that Porter made: (i) competitiveness at national level means national productivity and (ii) industries compete, not nations. His analysis is therefore wholly based on industry analyses.

If we look at some criticisms of the approach, we can highlight the following issues:

- Porter's theory is based on case studies of ten relatively affluent countries and it is not clear if the model is also easily applicable to developing countries.

- The approach has been popularised by the World Economic Forum through the Global Competitiveness Report, where Porter is Co-Director, as well as by management consultancy firms. Therefore, Porter's models have become a "standard equipment of a management toolbox", even a fashion.

- The Diamond might be applicable to large countries, however, critics argue that there should be a "double diamond" or "multiple diamond" for firms in smaller or peripheral countries, which could have access to determinants of a regional diamond, e.g. through regional trade agreements. The double diamond would be the case if a country depends very much on another one, so that they should be considered together in one framework (e.g. Canada and U.S.). As such, industry clusters can be located in both countries, subsidiaries of one country's MNCs are still considered although located in the other country and we look at both countries' domestic determinants. The "multiple" determinant allows including more countries as source for determinants of competitive advantage for industries (e.g. European Union).

- Another point of critique, which we did not address in this short overview, is that Porter argues that only outward-FDI can contribute to creating competitive advantage, i.e. local companies investing abroad. Inbound-FDI, however, would not increase domestic competitiveness, because the domestic firms lack the capability to defend their own markets and face a process of market-share erosion and decline. Other authors claim that also inbound FDI can be a key factor for competitiveness, especially in developing countries.

- Moreover, Porter's model does not integrate the role of Multinational Corporations (MNCs). Porter excludes foreign-owned MNCs as contributors to competitive advantage of advanced host countries and takes only "home-based" industries into consideration. Dunning (1992), for example, proposes to internationalize the diamond. Similarly, foreign-owned MNCs can affect the determinants of the diamond, e.g. the factor conditions. A recent analysis of Irish clusters shows that Porter's criteria for industry analysis cannot explain success in certain industries. One reason is that foreign-owned MNCs played an important role, which cannot be reflected using Porter's methodology.

- Porter's theory cannot reflect the current economic condition, but seems to still be deeply rooted in the world of the 1980s and especially Reagan's policies. Porter's model is based on
strong competition, cyclical developments, and relatively stable market structures where the analysis focuses on the current situation and predictable developments (new entrants etc.). The critique started under the rising importance of the Internet economy in the 90s. Economic conditions had changed fundamentally and Porter's models are not fully able to reflect and analyse today's dynamic. Critiques point out, that the 90s brought new "determinants", such as digitalization/technical progress/ICT, globalization and deregulation, which should be integrated into the diamond. The table below highlights that the so-called "management models", to which Porter's Five Forces, Value Chain and Diamonds belong, were developed in a specific historic context.

<table>
<thead>
<tr>
<th>Period of stable growth</th>
<th>Period of Competition</th>
<th>Period of Hypercompetition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Period</td>
<td>1945 to mid 70s</td>
<td>Mid 70s to mid 90s</td>
</tr>
<tr>
<td>Characteristics of competitive environment</td>
<td>Growth, Chances</td>
<td>Competition, Cyclical growth</td>
</tr>
<tr>
<td>Corporate objectives</td>
<td>Revenue growth, spread of risks</td>
<td>Survival, profitability</td>
</tr>
<tr>
<td>Corporate strategies</td>
<td>Expansion</td>
<td>Refocusing to core businesses, restructuring, niche marketing, mergers and acquisitions</td>
</tr>
</tbody>
</table>

Source: [http://www.themanager.org/Resources/Managementmodels.htm](http://www.themanager.org/Resources/Managementmodels.htm)

2. Other important players in the competitiveness arena

2.1 The IMD model of competitiveness

The IMD (INSTITUTE OF MANAGEMENT DEVELOPMENT?) in Lausanne, publishes every year a "competitiveness ranking" of nations that is somewhat similar to the Global Competitiveness Report of the World Economic Forum. We will examine both the Global Competitiveness Report and the World Competitiveness Yearbook in Module 3. While Porter has constructed a whole theoretic structure, the IMD focuses more on the measurement of competitiveness through rankings. The “theory”, however, is limited to a few ideas, which present the dimensions of competitiveness in very simplified terms. The four forces, which are explained briefly in the introductory chapter of the World Competitiveness Yearbooks, are mainly based on qualitative factors, such as tradition, history and value systems. Here is a brief description of their approach.
The four competitiveness forces or dimensions

Attractiveness versus Aggressiveness (WCY 2003 - The Fundamentals)

Traditionally international competitiveness (between countries) has been linked to the export structure of a country and its ability to pursue a successful foreign direct investment strategy. The IMD describes this type of competitiveness as aggressiveness, a strategy, followed e.g. by Japan and Germany. The opposite strategy would be to achieve competitiveness by being attractive in order to attract foreign direct investment. Countries such as Ireland and Singapore became competitive based on this strategy.

Aggressiveness can generate income in the home country, but not always jobs (in case of FDI). Attractiveness can create jobs in the FDI host country, but the impact on income depends on the incentives that were necessary to attract the investors.

Although countries should consider both attractiveness and aggressiveness in order to compete successfully. Most countries focus stronger on one approach or the other, e.g. Ireland is not very aggressive while being attractive. The United States seems to be able to be both aggressive and attractive.

Proximity versus Globality

The IMD distinguishes between the economy of proximity and the economy of globality. The economy of proximity comprises activities, which are directed to the domestic market, such as crafts, social and personal services (e.g. doctors and teachers), administrative services (e.g. national courts) or consumer-support-activities (e.g. after-sales services). In general terms, the economy of proximity provides value-added close to the end-user, tends to be more protectionist and expensive and less mobile. Although the economy of proximity might be less cost-efficient, it provides local employment and services and plays therefore an important social role.

The economy of globality consists of companies that take part in international operations. In this case, the production process can be geographically far from the end-user and the company can benefit from the competitive advantage of markets worldwide. In case of the economy of globality, ownership of the value chain is not the primary objective, it is more important to control and manage it. The factors of production are flexible and can be shifted from one place to the other. The agility facilitates increases in productivity that would be hard to achieve in the economy of proximity.
The proportion between the two economies depends on the size of the country and its stage of development. The United States, for example, still rely very much on their huge domestic markets.

**Assets versus Processes**

According to IMD, some nations are rich in assets, such as land, people, and natural resources, but they are not necessarily competitive (natural resources in many African countries, land in Russia etc.). Other nations are poor in resources and rely therefore on transformation processes. The IMD argues that inherited assets, apart from natural resources, can also include infrastructure, industrial power, and even education and skills. All these assets that have been accumulated by past generations can generate complacency in nations. That would correspond in its impact to Porter’s lack of a demanding home market and rivalry, which serve as catalysts for innovation and sustained competitive advantages.

**Social Cohesiveness versus Individual Risk Taking**

The last force that influences the competitive environment of a country, according to IMD, is the distinction between a system, which promotes individual risk and one that preserves social cohesiveness. Traditionally, the US model places more emphasis on individuals willing to take risks and promotes privatisation, deregulation and entrepreneurialism. This goes together with a limited welfare system. The Central European model has traditionally relied more on social consensus, a more egalitarian approach to responsibilities and a more extensive welfare system. Both models have coexisted and even competed during many years. In the last years, however, the Anglo-Saxon model has become dominant, witness the for example the blanket adoption in central Europe of social and economic reforms based on an Anglo-Saxon model.

**What is the IMD and who is the target audience of its work on competitiveness?**

The IMD is a business school that developed out of two earlier schools founded by Nestlé and Alcan, two successful global firm agglomerates. In this business tradition, IMD specialized in providing Executive Education for large and medium size international businesses and for individuals. Their work on competitiveness, located within the IMD at the World Competitiveness Center, is therefore primarily targeted at the business community and has the aim of supporting them e.g. in determining investment plans. However, they claim that their flagship publication, the World Competitiveness Yearbook, can also be used by governments (to compare policy success with other countries) and by academia (“to understand and analyse how nations compete”). We will examine the Yearbook in detail in the next module to find out, if the Yearbook achieves those objectives.

### 2.2 The OECD and its work on competitiveness

- The OECD does not provide one single theory or approach to competitiveness. Nevertheless, the organization plays an important role in the field of research on competitiveness:
- The OECD was one of the first international organizations that placed attention on the concept of competitiveness from a macroeconomic point of view. The organization convened workshops, conferences and studies, dealing primarily with competitiveness in OECD member countries. Over time they have also included in their research transition economies as well as the specific needs and characteristics of competitiveness in the context of developing countries. The range of subjects analysed under the concept of competitiveness has also widened over time (such as enterprise networks, city competitiveness, regional integration or fiscal instruments).
The OECD contributed to the competitiveness debate by proposing definitions that are (at the time of writing) most widely used and accepted. We had one example in the activities of Module 1: Competitiveness is "...the ability of companies, industries, regions, nations or supranational regions to generate, while being and remaining exposed to international competition, relatively high factor income and factor employment levels on a sustainable basis." The OECD bases this definition primarily on two approaches to competitiveness, the "engineering approach" and the "environment/systemic" approach. The first sees the competitiveness of a country as determined by the ability of firms in that country to adopt or shape the technical and organisational "best practices" in company activities. This approach states, like Porter, that a country's competitiveness is the sum of competitive strengths of its enterprises (Porter highlighted the role of industries). In the second approach, firm-level competitiveness is not deriving only from internal efficiency, but even more from the firm's environment (quality of inputs, infrastructure etc.).

The definition given is however better suited to nations, regions and supranational areas, because it relates to the goal of maintaining and raising living standards, which should be achieved by improving employed labour and capital productivity. The OECD does not enter into the debate about differences in national and industry/company competitiveness, as it points out that "...the definition suggests implicitly that a country or firm would be competitive if, for example, its labour productivity were to improve as a result of a rapid increase in incomes rather than because of a decline in employed labour."

For the OECD, the most important issue concerning competitiveness is measurement and its work on defining (quantitative) indicators is quite extensive. Although the importance of qualitative factors such as capacity for technological innovation or the value of after-sales services is not denied, the OECD focuses more on quantifiable factors, such as prices and exchange rates and tries to use e.g. macroeconomic, growth-accounting approaches to reveal sources of competitiveness.

By using the term in their research, the OECD contributed considerably to raising acceptance among economists who considered competitiveness as a term from the more "soft" discipline of business and management studies. The OECD served as a catalyst for an enhanced discussion of competitiveness in the world of policy makers, development agencies and academia. Other international organizations, such as UNIDO or UNCTAD followed the OECD in providing a forum for research and policy recommendations on competitiveness; however, they place more emphasis on the application of the concept in developing countries and the impact on development.

3. **Systemic competitiveness**

3.1 **What is systemic competitiveness?**

Systemic competitiveness was developed at the time, when believers in the free market as well as those who advocated government-driven development discussed the best way of achieving sustainable development. Government-driven development was to be achieved through import-substitution policies. Those obviously failed in many countries, and even created distorting structures in others. The purely market-driven approach, however, ignored historical experience and the fact that most developing countries suffer from both weak governments and weak markets. Systemic competitiveness shares the emphasis on the importance of sound macro-economic management and argues against the naïve belief in the invisible hand of the market. However,
government intervention is not always the answer either. By introducing key concepts of the governance discussion from political science into the debate on competitiveness, systemic competitiveness tries to address the question of where a society’s governance capacity comes from and what can be expected from both government and other actors within the society. While Porter, the IMD and the OECD looked particularly at competitiveness of developed countries or did not specify examples for developing countries, we will now look at a theory which examines competitiveness under the umbrella of development. For that reason we will sometimes replace the term competitiveness by its long-term goal - development. However, we can also use the framework when analysing developed countries. You will also see, that this framework can be applied both to international competitiveness (when comparing different countries) and competitiveness measured based on the own aspirations and history.

Systemic competitiveness is not one single model or one single theory. It pulls together contributions from various disciplines of economics and social sciences. These can be useful in understanding why competitiveness strategies, mainly in the field of industrialisation strategies, succeeded or failed. System in this approach refers to the pattern of actors, institutions, organisations and policies, all of them linked through complex feedback mechanisms. Taken together, they lead to one distinct economic system, which is normally national but could also be regional.

One main argument of the authors of systemic competitiveness is that competitiveness cannot be explained by isolated key factors, such a successful technology transfer. Key factors do not work alone, but are embedded in a system, and they lead to success, because other factors support them.

### 3.2 Conceptual Background

Systemic competitiveness tries to integrate different approaches, both from the economic and the social sciences point of view, into a new framework. The main concepts and issues, which are particularly important for the context of systemic competitiveness are presented in the table below:

<table>
<thead>
<tr>
<th>Economics</th>
<th>Social Science</th>
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<tr>
<td><strong>Innovation Economics</strong>: Research on innovation processes and systems, (to some extent in the line of Schumpeter's theory, see Module 1). Innovation is not an event but occurs as a process along a path. The decision for one path or another is taken considering specific national or regional political, economic, social, technical factors and coincidence. The innovation process is a cumulative, interactive process based on learning-by-doing, by-using, by-interacting. Innovation Economics highlights the importance of tacit knowledge, (cannot be fully codified and is therefore person- or firm-specific).</td>
<td><strong>Political Science</strong>: Political science moved from optimism to pessimism and back regarding the possibility of shaping industrial societies through policies. After the 1970s, characterized by hierarchical, top-down approaches to governance, new concepts of governance developed, such as policy networks that involve also non-state actors in horizontal structures. <strong>Main authors</strong>: Scharpf (1993), Atkinson (1992), Klijn (1995, 2000)</td>
</tr>
<tr>
<td><strong>Post-structuralism</strong>: Post structuralism</td>
<td><strong>Economic sociology</strong>: Seeks to analyse</td>
</tr>
</tbody>
</table>
Economics highlights the role of the state in development processes. Contrary to the "Washington Consensus", it places emphasis on the importance of government actions, depending on the level of development and the functioning of markets. However, it also underlines the significance of economic incentive structures, such as the role of competitive pressure in stimulating technological learning and upgrading.

**Main authors:** Lall (1992), Amsden (1989), Fajnzylber (1990)

**Institutional economics:** Tries to identify rules and norms that condition the behaviour of economic agents. They place emphasis on the importance of property rights and transaction costs.

**Main authors:** Williamson (1995), North (1995)

**Management science:** Creation of competitive advantage at industry level, see first part of the Module.

**Main authors:** Porter (1990)

**Economic geography:** Relevance of agglomeration and other spatial aspects. Spatial concentration stimulates rapid diffusion of knowledge.

**Main authors:** Storper (1997), Scott (2000)

Social Science structures and processes e.g. in power relations in economic transactions. They try to examine why economic agents behave as they do outside the rationale of economic models. One important issue is the role of trust and relational contracting.

**Main authors:** Granovetter (1992), Becattini (1990), Platteau (1994)

**Industrial sociology:** New production concepts, which differ from traditional Taylorist concepts. While management science introduced new organizational concepts such as lean production, systemic rationalisation etc. industrial sociology also analyzed obstacles to their introduction, such as power structures.

**Main authors:** Womack et al. (1990), Kern & Schumann

What all different theories have in common is the concept of networks and networks are a key issue for both the economic and the political facets of systemic competitiveness. Firms are not independent, but integrated into dense networks of other companies and mesoinstitutions, such as chambers of commerce or SME Promotion agencies. Also political actors are dependent on networks from different public institutions and representatives of different organizations from civil society (e.g. trade unions, lobbying groups). Therefore, systemic competitiveness does not stand "against" Porter or other theories, but is an attempt to "merge" different approaches. Systemic competitiveness corresponds to the broad view we defined in Module 1.

### 3.3 Meta-, Macro-, Meso- and Microlevel

Where Porter foregrounds the role of industries in building national competitiveness, the systemic approach examines the abilities of the whole society, in order to understand how and why it succeeds or fails in creating a favourable environment for companies. For that reason it seeks to capture economic determinants as well as political and social ones.

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**What is META?**

**Socio-cultural factors and shared values:** e.g. to determine whether entrepreneurial dynamics are stimulated or not in a certain society, social recognition of economic success, acceptance of the idea that free-riding jeopardizes social development, a priority for long-term investment and a propensity to save. These determinants will be difficult to enhance for example promoting entrepreneurship through macro- and mesopolicies, if the values are not rooted in the culture of a society.


We look in more depth at the role of trust and social capital as one example for socio-cultural meta-level factors:

Social capital can be seen as an umbrella term, embracing culture, values and networks. Putnam (1993) popularized the concept and defined it as "...features of social organization, such as trust, norms and networks that can improve the efficiency of society by facilitating coordinated action." Voluntary cooperation, as it is needed in public-private dialogue projects or policy networks, but also in inter- and intra-firm relations, will be easier if a society is rich in social capital. Social capital explains why cooperative behaviour exists more often than predicted by game theory, why individuals and groups decide to opt for another action than the optimal one. The motivation for that kind of cooperation can be due to the belonging to a common group (e.g. kinship, tribes, religious communities, social classes etc.), or, in a more complex setting, to networks of civil engagement or obligations arising from internalized norms such as the one of reciprocity.

Social capital can exist in formal (e.g. policy networks, companies, expert groups) and informal institutions (e.g. family relations), horizontal (actors of equivalent status and power, such as neighbourhood associations or cooperatives) and vertical (actors in asymmetric hierarchy and dependence relationships). Horizontal networks tend to be more beneficial than vertical ones since the latter cannot sustain social trust and cooperation over time.
Trust is the value that is a key factor for social capital and therefore also for a long-term competitiveness strategy. The different actors that have to work together in order to achieve a common strategy, have to show commitment to that goal, and commitment needs trust. However, trust is both the cause and the effect of cooperation, since someone can only build up trust after repeated good experiences. Social capital can be found in three forms: as (i) information channel, where one uses social relations as a knowledge source, (ii) obligations and expectations and (iii) social norms and sanctions.

Strong social capital can also have negative affects on economic performance and competitiveness. The strong ties members of a group benefit from can exclude at the same time others. This would be the case with strong lobbies. Very strong group norms might force successful members to share their income. Negative externalities might then prevent them from engaging in an optimal way in activities. In general, strong social ties can constrain individual success.

The strategy and policy competence of different actors: capacity to formulate together strategies and to implement policies. The success stories of East and Southeast Asian countries have among others also been enabled by strengths at the metalevel, since there was a general consensus among actors about required adjustment policies as well as control and guidance processes. Policies at macro- and mesolevels can only be successful if social structures at the metalevel enable shared ideas and the formulation of policies all or most actors can agree on. There must be a sufficiently big group that share the same ideas, with regard to e.g. the right choice of competitive advantages or how profits and costs of market integration could be distributed among different social groups. Centralist political decision-making, for example, as well as bureaucratized, inefficient governments do certainly not support a competitive strategy based on decentralised industry clusters, horizontal and vertical networks.

Commitment of government and other actors to competitiveness policies is crucial, since competitiveness policies do normally address structural issues, such as skills, technology or institutional reform, where results appear in the long-term. Success in competitiveness policies is therefore only possible if implementation is pursued seriously and does not end with a change in government (that often leads to policy reversals). Long-term orientation is also important to avoid that priority is given to current interests.

Commitment to common competitiveness objectives among the different actors is certainly a fundamental condition. Sometimes however, governments simply lack the required skills and information to formulate, implement and monitor such a strategy. In order to design and implement successfully competitiveness strategies (including e.g. foreign investment targeting, training programmes and technology development schemes), the government has to dispose of advanced economic, management and information technology skills - skills that are often short in supply in developing countries civil services. Different recruitment schemes that consider more hiring specialists with previous experience in the private sector could increase government capabilities.

Developing countries that opened up only recently and were previously characterized by inward looking policies have sometimes small and underdeveloped private sectors that have little industrial experience. In this case, private sector companies normally do not have the technological and marketing capabilities to adapt quickly to incentive policies or to give advice to the government. Some
governments may also tend to neglect the private sector in consultative processes, particularly if it has a socialist tradition. Public-private dialogue, policy networks (that do not reinforce the privileges of already powerful groups/lobbies) and partnerships are however very important in order to achieve shared objectives, a coherent policy formulation and the implementation of policies. All dialogue should be periodic, representative, that means involving all stakeholders, and it should have an announced agenda. Governance capacity is also needed to avoid structures where privileged groups can pursue their particular interests, enhancing social disintegration and the exclusion of broad segments of the population.

The basic pattern of political-economic organization: an outward-looking and competition-oriented (between firms but also between other actors such a political groups) pattern can encourage competitiveness, while a pattern characterized by protection and extreme inward orientation will not. Being aware of the increasing internationalization of the economy does not automatically mean that a nation should aim at high export ratios. However, firms do compete even in domestic markets with imported goods and should therefore try to come closer to international quality and efficiency standards. Global political-economic trends such as the integration in the international trading and financial systems can influence national policy space and therefore the political-economic organization.

Openness, integration and policy space

"The ability of Governments to pursue the most suitable development policies should not be unduly constrained. The ITS [International Trade System] needs to allow for legitimate policy space necessary for developing countries to pursue a proactive, strategic mix of trade and development policies suited to initial conditions, dynamic comparative advantage and changing needs and circumstances. It is for each Government to evaluate the trade-off between the benefits of accepting international rules and commitments and the constraints posed by the loss of policy space." (UNCTAD secretariat, 2004)

Are openness and integration into the global trade and financial systems necessarily beneficial? Do trade and capital openness, together with improved institutional quality and technological spillovers automatically lead to catch-up growth and competitiveness? To pursue openness at any price does not take into account that there are not only gains from participation in international markets, but also adjustment costs, and that trade is only one of various factors that contribute to development and competitiveness.

The neoclassical approach links the benefits of openness to the fact that resources can be used in the most efficient way and that freely trading economies will achieve specialization gains since they can access a higher number of goods. Another approach, still based on Adam Smith's perspective on trade, sees openness linked to productivity gains through specialization. These gains will be increased through innovation, scale economies and positive externalities such as improvements in human capital. In the best case, productivity gains should lead to a structural change with a shift into more capital- and technology-intensive activities and complementary services.

However, openness increases also interdependencies and exposes companies and industries to shocks and discontinuities that come for example from imperfectly functioning markets and volatile international capital flows, leading to pro-cyclical bandwagon effects. Therefore, enough "policy space" is needed in order to complement the opening process with norms, policies and regulations that prevent and respond to shocks, market failures and conflicts of interests. "Infant industries" might even be first excluded from the integration agenda. However, infant industry protection can only lead to competitiveness if there are in the medium-term still (domestic) competitive pressures on the industry to invest in technology and human capital. Another example concerning
technology imports would be to restrict selectively foreign direct investment and to facilitate technology imports in form of e.g. licensing, equipment and imitation.

Trade is not the only factor that determines the process of integration. Other forces have to be present, such as learning and innovation, scale economies and capital formation. These forces are not only created by rapid opening up of the economy but need complementary measures - in the economic, but also political and social field. In order to achieve competitiveness gains from opening up, policy makers have to face the challenge of finding the right balance between domestic and external objectives, between openness/international market forces and the policy space and collective action needed by countries with very different institutional and industrial capacities. Policy objectives across nations have to allow therefore a wider room for discrimination in favour of countries with lower efficiency and income levels.

In developing countries, metalevel determinants tend to be underdeveloped and are therefore often a key bottleneck for improving competitiveness and development. Many countries started structural adjustment programs in order to facilitate the change from inward-oriented development strategies to more openness and an enhanced integration in world markets. Institutional reforms achieved to improve generally transparency in institutional decision-making. However, these policies that generally promoted reducing the scope of the government, underestimated that many developing countries are characterized by weak markets and civil societies or even an incomplete process of nation-building. Downsizing too much the public administration can in such a situation lead to further social disintegration. However, competitiveness in its broad definition cannot be achieved without social integration, where not only the role of the government is redefined but also the one of business associations, labour unions and other civil society organisations.

Metalevel obstacles are in general very difficult to overcome since power structures, traditions and values are deeply inherited and do not change rapidly. It is almost impossible to push transformation at the meta-level by external influences. Moreover, metalevel factors do interact with other factors and can create a stable blockade constellation. Change can often only be achieved over a long period of time through changes in firm (micro- and mesolevel) and government (meso- and macrolevel) patterns.

What is MACRO?

At this level, we have to examine mainly the generic economic conditions, but also the political and juridical framework. We have to look e.g. at exchange rate policies, financial markets, trade policies and both inward and outward investment, characteristics of the labour market, fiscal policies etc. The sequencing of policies and the given priorities depend always on the specific circumstances. Macro policies can, together with adequate trade and industrial regimes, act as incentives for competitiveness, interacting with "institutions" at the mesolevel (education, technology support and finance), the factor markets and the level of entrepreneurial skills available in the country.

A stable and predictable macroeconomic environment, which includes well-functioning factor, commodity and capital markets, is a key condition for an effective allocation of resources. Instability hampers the functioning of factor and commodity markets (costs and productivity), lowers the country's attractiveness as target for investment, constrains innovative investment and entrepreneurship and an increase and improvement of human capital. Sources of macroeconomic instability are e.g. high budget and current account deficits, an overvalued exchange rate etc.

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Stabilization of the macroeconomic framework is often based on the reform of fiscal, budgetary, monetary as well as currency and trade policies and is a difficult undertaking. Fighting inflation, for example, can lead also to a cutback in investment, adjustment costs may exceed adjustment gains in the short-term and not all social groups are affected and can benefit in the same way from reforms.

In a development context, we have to be aware of the fact, that there might be a tension between (i) the goals of creating a stable macroeconomic framework to secure the basis for future growth and (ii) competitiveness on international markets from a short-term point of view. If inflation is e.g. mainly combated through restrictive budgetary policies, those may also lead to a decrease in investment. Measures to reduce state expenditures often start often with cutting budgets in education, health, and the development of physical infrastructure. Instead, reduction of military expenditures or introduction of fixed-term and degressive subsidies can be a way of avoiding such a tension.

What is MESO?
At the Mesolevel, we will look at specific policies and institutions, which are thought to support the efforts of firms. Mesopolicies are, in opposite to macroeconomic policies, selective. They target a limited group of economic actors (e.g. technology policy for specific sectors or regional policy, to promote lagging regions). To simplify it in a nasty way we could say that macroeconomic policies try to create equal conditions for all economic actors, mesopolicies distort those conditions. However, we should look at mesopolicies the other way round. Markets often fail and mesopolicies are there to try to remedy market failures (e.g. SME promotion, since SMEs normally suffer from disadvantages in case of economies of scale).

It is sometimes difficult to classify a policy clearly as macro or mesopolicy. Trade policy, for example, has elements of both levels; trade promotion activities for specific industries would be mesolevel while a general policy regarding the simplification of export procedures will be a macropolicy. Also with regard to education and research, infrastructure and environment we can find both actions at the macro- and mesolevel.

Who are the actors at the mesolevel? Not only governmental institutions create mesopolicies. There are also non-governmental actors, such as business associations that are interested in improving the competitiveness of their members, foundations and NGOs, involved e.g. in microfinance initiatives.

To explain Mesospace activities, the systemic approach reverts to Porter's distinction of higher-order and lower-order factors. Lower-order factors would include e.g. natural resources, climate, unskilled labour or debt capital. Higher-order factors will be created over time through private enterprises (e.g. provision of venture capital), through business associations (e.g. provision of technology formation and dissemination) and government activities (e.g. university research, education). We can further distinguish between generalized (e.g. highway system, pool of well motivated employees with tertiary education) and specialized factors (e.g. narrowly skilled personnel for one specific task, knowledge in particular fields or infrastructure with specific properties).

The table below presents different mesolevel activities, which are normally services, not products, based on Porter's concept of the evolution of factor conditions.

<table>
<thead>
<tr>
<th>Basic functions</th>
<th>Technology</th>
<th>Finance</th>
<th>Foreign Trade</th>
<th>Chambers and associations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Measurement, standards, quality insurance</td>
<td>Credit, investment capital</td>
<td>Basic foreign trade transactions</td>
<td>Elementary services, Ad-hoc-lobbying</td>
</tr>
</tbody>
</table>

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### What is MICRO?

At the Micro-level, the systemic approach analyses firms and intra-firm networks at all levels of geographical aggregation. The systemic approach highlights that firms have to optimise four factors in order to become competitive: cost-efficiency, quality, variety and responsiveness (react quickly to changes in demand and new opportunities). To reach that objective, firms will have to approach changes in three areas - organization of production (reduction of time-to-market and throughput times), organization of product development (e.g. integration of R&D, production and marketing to reduce development times and increase efficiency of production and marketing) and organization of the value chain (e.g. concentration on core competencies, optimise supply and delivery times, integrate selected suppliers in product development).

In all changes, we have to be aware of interrelationships among organizational, social and technical aspects. To use e.g. a new computerized hardware, it will be often necessary to have a reorganisation process before and changes in social aspects (such as the introduction of flat hierarchies) might be the prerequisite for new organizational concepts (e.g. Knowledge Management).

Similar to Porter, we find also in the systemic approach the need for an analysis of the industry structure as part of the Micro-level. The authors, such as Jörg Meyer-Stamer and Klaus Esser from the German Development Institute, name some additional ways of classifying industries, such as to distinguish between consumer durables and non-durables, intermediate goods and capital goods. However, industries and firms hardly do fit perfectly into one classification. In all analyses it will be therefore important to differentiate between empirical concepts (How do I order a given reality?) and normative concepts (Which industry should I try to stimulate because it has a positive impact on welfare?).

### 3.4 All four levels from a development perspective

To distinguish between the four levels is not only useful to analyse the national level but also to understand local and regional economies, as well as to address supranational factors. Moreover, we have to be aware that "micro", for example, does not mean local and that "meso" does not mean regional, but that you can find examples of the four analytical levels at all levels of geographical aggregation. The following table shows some factors at different levels of analytical and geographic aggregation that influence local development initiatives. It is an example on how to consider different factors that may facilitate or limit local initiatives.


<table>
<thead>
<tr>
<th>Advanced functions</th>
<th>Development banks, microfinance institutions</th>
<th>Export financing, export credit insurance</th>
<th>Specialised services, business networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technology transfer agencies</td>
<td>Venture capital, specialised finance institutions</td>
<td>Advice and support for market research, design, packaging etc.</td>
<td>Advice role in local policy</td>
</tr>
</tbody>
</table>

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<table>
<thead>
<tr>
<th>Level</th>
<th>Example</th>
<th>Example</th>
<th>Example</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metalevel</td>
<td>Competition between different types of market economies</td>
<td>National development strategy, national innovation systems</td>
<td>Regional identity</td>
<td>Local actors' capacity to cooperate, trust, innovate the environment</td>
</tr>
<tr>
<td></td>
<td>(a)</td>
<td>(b)</td>
<td>(c)</td>
<td>(d)</td>
</tr>
<tr>
<td>Macrolevel</td>
<td>International financial markets</td>
<td>Macroeconomic framework conditions (e.g. tax system, financial system)</td>
<td>Solid budgetary policy</td>
<td>Solid budgetary policy</td>
</tr>
<tr>
<td></td>
<td>(e)</td>
<td>(f)</td>
<td>(g)</td>
<td>(h)</td>
</tr>
<tr>
<td>Mesolevel</td>
<td>EU industrial/technology policy, Montreal protocol</td>
<td>Promoting new technology, export promotion, specialised financing agencies</td>
<td>Regional economic development, technology demonstration centres, R&amp;D institutes, training institutions, regional environmental policy</td>
<td>Local economic development</td>
</tr>
<tr>
<td></td>
<td>(i)</td>
<td>(j)</td>
<td>(k)</td>
<td>(l)</td>
</tr>
<tr>
<td>Microlevel</td>
<td>Transnational corporations, Global commodity chains</td>
<td>Medium-sized and large corporations, Dispersed networks</td>
<td>SME, Regional clusters</td>
<td>Local clusters, local subcontracting</td>
</tr>
<tr>
<td></td>
<td>(m)</td>
<td>(n)</td>
<td>(o)</td>
<td>(p)</td>
</tr>
</tbody>
</table>


**Metalevel:** (a) Which model of capitalism (if it is capitalism) should a country choose? The Anglo-Saxon model, the East-Asian model of guided capitalism, or maybe the European model of Socially moderated capitalism, or something else? (b) Basic economic and political patterns will shape and condition the options at regional and local level. (c) This is the case in country, which is not strongly centralised but leaves regions a certain level of autonomy. (d) Even at local level you can find different opinions about how to reach a common development objective.

**Macrolevel:** (e and f) As we saw it in the 1990s, financial crises or the policies of the IMF can shape the opportunities for development at regional and local level. At the lower levels (g and h), the budgetary policies will influence the development options.

**Mesolevel:** (i) In the European Union, the common technology policy, regional policy, agricultural policy etc., are examples for Mesolevel policies at supranational level. Other regional blocks, such as ASEAN and Mercosur, are also on the way of defining some common policies at that level. The Montreal Protocol about substances that deplete the ozone layer would be an example at the global level. (j - l) Mesolevel policies are often implemented at all three geographic levels. In the case of technology policy, you will have the national government, which promotes e.g. the development of new generic technologies, the provincial or regional government might support the introduction into companies and local governments could help start-up companies that want to commercialise a new technology.
Microlevel: (m) Some companies are part of global value chains, i.e. they produce for foreign buyers or are affiliates of transnational corporations. As such, their room for manoeuvre will be restricted. (n-p) The case is similar if local companies are integrated into national or regional supplier networks. They will have special interests concerning local level development initiatives, such as cluster promotion strategies.

3.5 Conclusion on systemic competitiveness

While Porter and the IMD place more emphasis on the microeconomics of competitiveness, we see that the systemic approach integrates also theories coming from social sciences. It highlights the importance of interaction of the four levels, of dialogue and shared-decision making in order to achieve competitiveness, which is in the case of the systemic approach economic and social development. Although the approach has been widely used in developing countries, it can also be applied to industrialized countries. The systemic approach is not in favour of blind government intervention, however, it places more emphasis than e.g. Porter on examining the ability of governments and regional institutions to shape the environment for competitiveness.

Systemic competitiveness cannot be clearly assigned to one specific author. In the first half of the 1990s, however, the German Development Institute (Esser, Hillebrand, Messner and Meyer-Stamer) formulated Systemic Competitiveness as an analytical concept, pulling together contributions from various disciplines from economics and political/social sciences.

Due to its focus on development, it is not surprising that the systemic approach is used within the work of development cooperation by international organisations with a development perspective, such as UNCTAD, ILO or ECLAC or by development agencies, such as the GTZ.

The big strength of the systemic approach though, can also be seen as a major weakness of systemic competitiveness. The approach tries to take into consideration and to reflect as much as possible the complexity of causes and effects of determinants of competitiveness. All levels and most determinants within the levels are linked through feedback loops, vicious and virtuous circles in order to reflect that the system undergoes constantly changes. Compared with economic models, where assumptions are taken and factors are set "ceteris-paribus", an analysis using the systemic approach seems quite challenging, if not unrealistic, since one is not able to retrace all interdependencies.

KEY READINGS


For this module, it would be helpful to read Part I of Porter's "bible" on competitiveness at national level. In that part, he explains the foundations of his theory, going both into the competitive advantage of firms and the determinants and dynamics of national competitive advantage. Students could then choose one case study out of Part II on Industry analysis and one case study out of Part III on patterns of national competitive advantage. Part III, Chapter 10 deals with the stages of competitive development (factor-driven, investment-driven etc.).

If you wish to carry out one complete analysis following Porter's methodology, you will have to refer to Appendix A, where the methodology for preparing cluster charts is explained.

The approach is included in the introduction of the WCY 2003 and you can also find a version on the website of the IMD (http://www02.imd.ch/documents/wcc/content/Fundamentals.pdf). Apart from the four dimensions, it explains briefly the importance of cultural impacts on competitiveness and the evolution of value systems.

The working paper addresses competitiveness in the context of globalisation and explains the definition of competitiveness that has been proposed by the OECD Secretariat. It goes then into the discussion of indicators. Reading for this module: p.1-23.

The paper describes the context of systemic competitiveness, discusses individual determinants at the four levels (Meta, macro, meso and micro), describes the process of developing systemic competitiveness in industrially backward countries and looks at the links between systemic competitiveness and ecological responsibility, social equity and sustainability. For this module, the reading would be limited to Part I "International competitiveness - new requirements". You can find the paper on the website of one of the authors, Jörg Meyer-Stamer. (http://www.meyer-stamer.de/1996/sysco-book.pdf)

This paper gives a brief overview about what systemic competitiveness is and where it comes from and analyses then the mesolevel in more detail. Chapter 6 can be interesting, since it addresses the role of systemic competitiveness for development cooperation. The paper can be found under http://www.mesopartner.com/publications/Systemic_revisited.pdf
Activities Module 2

Activity 1: Porter's diamond

Objectives of the activity:
To compile sources of information as a first stage of a competitiveness analysis of a concrete country or industry, according to the diamond model.
To begin to apply part of Porter's theory of competitiveness.
To test the usability and relevance of the competitiveness diamond.

Tips & Comments:
The search can be done off the class hours, during the class then the presentation and a discussion. To make the activity shorter, the lecturer could also decide to do just a brainstorming during class. It could be helpful to provide students one complete example, e.g. out of
This is a preliminary activity to give students an opportunity to begin a concrete analysis, they are not expected to undertake a detailed study. The data they collect can be used later in the module for a more complete analytical case study.

Instructons
The first step in any analysis of a countries' or industries' competitiveness is having the data on which to base your study. This task is concerned with this important first step - finding and organising relevant information.

1. Students define a national industry, which they think (without detailed research) is competitive and define the period of time they would do the analysis for. Remember, the point of exercise is to find data!
2. Students brainstorm and present concrete sources they would use to find information about the four determinants (factor conditions, demand conditions, related and supporting industries and firm strategy, structure and rivalry) as well as the role of chance and government. They do not have to present the data itself, but should prepare a list of websites, books, institutions, which could provide information.
3. Discuss the problems they faced to find adequate sources.

Questions for Porter

Tips & Comments:
The questions can be used in discussions, in tests, as work/short essay that has to be prepared at home.

1. Porter argues that productivity is the only meaningful concept of competitiveness at national level. At the same time, he points out that the ultimate goal at national level should be increased living standards.
   Does higher productivity always lead to increased living standards? Can you find examples that support Porter or that show that increased productivity does not necessarily lead to increased living standards?

2. Do you agree with the statement/assumption that competitiveness can only be analysed by looking at specific industries? Give reasons for your answer.

3. Find one industry, which has high entry barriers, and another one with a high threat of substitutes. Describe the barriers and the nature of substitutes.

4. Find examples and counter examples for the statement that sophisticated domestic demand is necessary/supports the creation of a competitive advantage. (NOTE: this question is designed to get students thinking also about exports...What do you think about the possible impact of export demand on innovation and competitiveness?)

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5. Brainstorm advantages and disadvantages of geographic proximity to upstream and downstream industries.

6. In the text of the module 2 handbook, you can find examples of how governments can influence factor and demand conditions. Find examples on the way, governments may influence the other two determinants: related and supporting industries and firm strategy, structure and rivalry.

7. Discussion: Are Porter’s arguments persuasive? What arguments do you agree with and what arguments do you find unconvincing? Why do you think that Porter has been so influential?

**Activity 2: IMD Dimensions of Competitiveness**

Try to locate different countries in the scheme of antipodes. Discuss utility of the IMD dimensions and think about who is the target user of such a concept.

**Questions for IMD and OECD:**

1. Concerning the dimension attractiveness versus aggressiveness: Find an example country, that is attractive to foreign investors (attracts FDI), but where this does not lead to job creation as stated in the "Fundamentals" of the "World Competitiveness Yearbook 2003".

2. In the "Fundamentals" of the WCY 2003, Stéphane Garelli, Director of the World Competitiveness Project and Professor at the IMD, writes: "The United States seems to be the only country that is able to be both very attractive and very aggressive." Do you agree? Did China replace the U.S. in that particular position?

3. State and explain three contributions of the OECD to the analysis of competitiveness.

**Objectives of the activities:**

Apply knowledge concerning levels of determinants to concrete cases.

Identify different backgrounds (economics and social sciences) in the systemic approach.

**Activity 4: Systemic Competitiveness**

Questions and analysis

1. Take an example of one industry in your country (you could use the data you collected in Activity One to help you decide which industry) Identify 2 meta, 2 macro, 3 meso and 2 micro factors that influence its competitiveness.

Are the same factors relevant to the country as a whole?

2. Read carefully the texts below:

**Inherent problems of Local Economic Development (LED) initiatives in developing countries**

Why is it that LED is not as successful as one might expect? Based both on my research and my practical experience, I would argue that LED initiatives in developing countries suffer from four typical inherent problems:

- A strategy- and planning-driven approach to LED, driven by local authorities whose capacities are already overstretched.
- A confusion between community development and LED. Any successful LED initiative is based on the involvement of the local community. But LED is about creating favourable conditions for business and alleviating local market failure, whereas community development is about health, housing, education, crime and support for the disadvantaged.
- An unclear theoretical and conceptual background for LED, and a confusion between business and LED. LED initiatives ought to enable private business. They must not substitute for it.

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A profound confusion about good practice in terms of governance of LED: Should there be a dedicated agency? What is the respective role of the public and the private sector? How should they co-ordinate their efforts?

I tend to argue that bottom-up, action-driven participatory approaches are more promising than approaches which presuppose lots of institution- and capacity-building before anything practical happens, and that action-oriented approaches are more promising than approaches which put huge resources in terms of time and money into analysis before any implementation happens. In my view, it is an open question to what extent localities in developing countries can learn, in terms of an effective institutional setting and process management, from the decades-long experience of industrialized countries. It is probably more advisable to learn from earlier experiments in decentralized development promotion, such as the not-too successful integrated rural development programs.

(from Jörg Meyer Stamer (2003): Why is Local Economic Development so difficult, and what can we do to make it more effective? mesopartner working paper, 4)

Institutional consolidation of networks
The mutual dependence of the actors involved in a network on the governance resources of others implies a tendency toward continuity in actor relationships and thus a minimum of institutional consolidation. Relatively stable cooperative relations characterized by a specific pattern of mutually accepted organizational identities, competences, and spheres of interest, i.e. a minimal basic institutional consensus, make it easier to find compromises to settle conflicts of interest between network actors.

The pressure to stabilize a network and find compromises increases in relation to the reliance on the governance resources of other network actors and the duration of the cooperative relationships involved, both of which lead to specific transaction costs that constantly rise over time. The accumulating “costs of exit” make it more and more unattractive to abandon network cooperation.

If stabilization fails to materialize, loosely linked networks are threatened with disintegration.

The transition from the “weak ties” characteristic of the precarious relationship structures of emerging networks to “stronger ties” can, however, at the same time serve to illuminate potential weaknesses of network structures. Networks act in a field marked on the one hand by disintegration, adjustment risks, and “endless disagreement” between the actors involved and on the other hand by functional and cognitive obstruction stemming from a surplus of social cohesion. We can discern in this field four problem dimensions that are in part also intensified by the “time dimension of decisions,” and this gives rise to particularly clear-cut problem trends.

(from Dirk Messner and Jörg Meyer-Stamer (2000): Governance and Networks. Tools to Study the Dynamics of Clusters and Global Value Chains, p.18)

Prisoner’s dilemma in structural adjustment. When crises-ridden industries have to undergo structural adjustment, i.e. when companies have to reduce their production capacities, state intervention into this process may make sense. Interventions in to Japanese process industries in late 70s and early 80s are a positive example in this context. If companies are compelled to adjust to shrinking markets, the individual company will be quite inclined to resort to price-cutting so as to force competitors to close down capacities. The ensuing price-cutting race may produce buyers’ rents in the short term. There is, however, the risk of stimulating a too chaotic adjustment process, which leads to higher capacity reductions than necessary. Moreover, the companies involved may be weakened in terms of finance to such an extent that their ability to invest in modernization and research and development of new products and processes is impaired so that in the longer run consumers too will have to bear negative consequences.


In red highlight ideas that are influenced by SOCIOLOGY, in yellow anything influenced by POLITICAL SCIENCE, in blue anything from HISTORY and in green DEVELOPMENT ECONOMICS

Discuss your results in pairs or in small groups.

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Discussion/ Review Questions for systemic competitiveness:

1. How does the idea of networks contribute to the systemic theory of competitiveness? (answer: competitiveness created by interaction)

2. Describe the differences between Macro and Meso level national policies? Are there any areas of overlap between the two? Give an example of a government policy that has both macro and meso elements.

3. Do you think there are any possible conflicts and/or contradictions between and among the different levels of systemic competitiveness? (prompt question: For example, is a stable macro-economic environment compatible with open and inclusive government)

4. Compare and contrast Porter’s approach to competitiveness with the systemic theory. (prompts: what are the key differences, what are the key similarities? Strengths? Weaknesses?)
References Module 2


OECD (2003): *OECD International Trade and Competitiveness Indicators. (ITCI)* OECD


MODULE 3: ASSESSMENT AND MEASUREMENT OF COMPETITIVENESS

In the first two modules, we explored the context of competitiveness, as well as the different definitions of the concept before examining some of the key analytical approaches to competitiveness. In this third module, we will examine different ways of measuring it - what are the indicators that illustrate "competitiveness" and how do we make sense of them?

As with the definitions of competitiveness, there are both narrow and broad approaches to measuring competitiveness at a national level. Narrow macroeconomic indicators we will discuss include for example the real effective exchange rate, FDI flows, or export performance (export market shares).

At the microeconomic level, competitiveness can be measured e.g. by international differences in factor costs, productivity or unit labour costs. The OECD has been especially important in analysing quantitative indicators of competitiveness. You will see that it is difficult to define a unique indicator for competitiveness. Instead, it will be more feasible to propose a group or a series of indicators to assess competitiveness.

An additional important measure of competitiveness is GDP per capita. This can be used as a measure of living standards - the most important "goal" of competitiveness at national level. However GDP per capita as a measure for living standards only gives us part of the picture, it does not provide any information about how wealth is distributed within a country, it does not reveal anything about the variety of goods and services within an economy nor does it give any indication of the level of social cohesion within a given population. All of these issues are arguably factors in defining living standards.

What this example begins to illustrate are some of the difficulties in measuring competitiveness - finding comparable data, combining quantitative and qualitative measures, defining what counts as an indicator of fairly abstract concepts such as "quality of life". It is these issues that this module will address.

The module will first describe some of the key macro-economic indicators of competitiveness and their strengths and weaknesses. It will then go on to describe competitiveness "rankings" (such as the ones from the World Economic Forum or the International Institute for Management Development) and Benchmarking exercises that attempt to construct competitiveness measures in a broader sense, integrating for example indicators for infrastructure, education/human capital, labour market rigidities, internationalization, management or science and technology, as well as qualitative aspects such as transparency of the government, corruption, political stability, quality of life etc. Throughout the module, we will try to examine critically the different indicators and measurement methods in order to determine their strengths and weaknesses.

1. Macroeconomic and microeconomic indicators

1.1 Price and cost competitiveness
We can evaluate price competitiveness by measuring price differentials (production, export and import prices) between different producers and exporters. Export prices have the disadvantage that they do not consider the prices of products that are not exported because their prices could not compete with world prices. They are not competitive now but are still potentially exportable. These losses in competitiveness are neglected in export price measures.

Cost indicators usually relate to labour costs. The main problem hereby is that other types of costs are neglected, such as transaction costs, R&D costs, costs of distribution or financial fees. These types of costs represent an important part of total costs but are often difficult to measure and to compare across countries.

One indicator, which is based on labour costs (hours or numbers of workers employed) and considered by Michael Porter as the main indicator of competitiveness, is productivity. Non-price factors such as advanced technology or higher education influence labour productivity positively, by lowering the "input", e.g. hours employed, or increasing the output.

Most of the following indicators look at a country's performance compared to other countries. However, it is important to highlight that all countries can simultaneously raise productivity and wages to improve their overall economic welfare without changing their competitive position relative to other countries if these also manage to raise their productivity levels. The internal competitiveness goal would then be achieved, the relative competitiveness in comparison with other countries however would only be maintained or can even worsen.

The table below shows levels of labour productivity in the manufacturing sector, comparing several OECD countries with the United States.
Also in 2001 continues the U.S. with the highest labour productivity levels, at least if we look at productivity as GDP per person employed. If we measure it however as GDP per hour worked, Belgium, France, the Netherlands and Norway would show a higher level than the U.S. The difference could be based on the fact that working hours per person employed decreased more in these European countries than in the U.S.
1.2 Real exchange rates

A monetary indicator that is widely used in economic analysis is the real exchange rate, since it allows comparisons of cost or price competitiveness based on a common currency. The advantage compared to nominal exchange rates is that it takes into account changes in real prices in different markets. We will leave the discussion of the use of exchange rates as policy tool for module 4. We introduce briefly three different real exchange rates - based on consumer prices, based on export unit values and based on unit labour costs.

Real Exchange Rate based on consumer prices

The real exchange rate can be calculated based on consumer prices (price competitiveness):

\[ RER_{\text{CPI}} = \frac{E \cdot CPI}{CPI^F} \]

E denotes the nominal exchange rate, CPI the domestic consumer price index and CPI\(^F\) the foreign consumer price index. If the consumer price index of the home country rises relative to the foreign one (i.e. we have a real appreciation), the competitiveness of the home country will decrease. A disadvantage of this indicator would be that it might be distorted by price controls and that the trade in intermediate goods is not reflected. The basket of goods on which the index is based is also not comparable among all countries.

Real Exchange Rate based on export unit values

Also this second indicator assesses price competitiveness. It is based on export unit values of manufacturing products. It compares the home country’s export unit values (UV\(_X\)) with the export unit values of foreign competitors in a given market (UV\(_X^F\)), expressing both in the same currency:

\[ RER_{\text{UV}} = \frac{E \cdot UV_X}{UV_X^F} \]

The weakness of this indicator is, that it does not consider trade in services. Another problem is, that it only contains information about changes in exports, but does not to assess performance in imports. Therefore, it is difficult to assess the overall change in the trade balance.

Real Exchange Rate based on unit labour costs

The third indicator measures cost competitiveness instead of price competitiveness. Unit labour costs are defined as a ratio of employee compensation (including non-wage labour costs) per employee and the volume of output (value added at constant prices) per employee expressed in a common currency. Relative unit labour costs depend therefore on three factors: relative labour costs per worker, relative labour productivity and the exchange rate. Therefore, a 10% slower rise in nominal labour costs, 10% depreciation in the exchange rate or a 10% faster increase in labour productivity would have an identical impact on the measured relative unit labour costs.

\[ RER_{\text{ULC}} = \frac{E \cdot ULC}{ULC^F} \]

A disadvantage of this indicator is that it tends to overestimate the impact of exchange-rate changes on the competitiveness of domestic exporters, since some of the exported products may rely on
imported intermediate inputs. A high degree of import content in exported products can offset the competitive advantage or disadvantage provided by nominal currency depreciations or appreciations. Moreover, unit labour costs are sensitive to cyclical movements in labour productivity over the course of the business cycle. Strengths are, at least for developed countries, that the data is normally available on a comparable basis. Moreover, unit labour costs provide information on an important component of production cost that is non-traded and therefore normally not equal across countries. For this reason, relative unit labour costs themselves are also considered an indicator for competitiveness.

None of the three exchange rates is a perfect indicator. From the empirical side, there can be difficulties to apply the indicators uniformly across countries. There are certain overlaps in the information they can provide. All indicators will for example reflect changes in the traded goods market and changes in the nominal exchange rate that are not related to price and cost structures.

But there is also information that will be picked up by one indicator and not by the others. If competitiveness means only "relative prices of traded goods", the real exchange rate based on the consumer price index will not be the best one since it includes also the prices of non-traded goods. But one could also argue that prices in non-traded goods will have an impact on the relative attractiveness of producing goods for export, it is also important to take account of developments in the non-traded sector, for example due to factor mobility across sectors. The indicator based on consumer prices can also detect changes in competitiveness that are not reflected by unit labour costs. Labour is not the only input factor. Others are for example capital and intermediate goods. Consumer price indices will capture increases in overall production costs under the condition that those are passed on to consumers through increased prices. On the other hand, consumer price indices tend to be more volatile than e.g. unit labour costs. With regard to exchange rates based on export unit values we can argue that they contain information about all intermediate inputs in production whereas an indicator based on labour costs contains only information on the price of labour.

All price and cost indicators represent the view of comparative advantage, i.e. the ability to produce a good at lower cost relative to another country. "Competitiveness" measured by those indicators is linked to the cost structure of an economy and the evolution of its real exchange rate, as well as changes in productivity. If competitiveness measured in the same way as comparative advantage, is then Krugman right when he points out that competitiveness is actually nothing more than what economists call productivity?

1.3 Export market shares (foreign markets) and rates of import penetration (domestic markets)

We mentioned in the definition of competitiveness at company level, that one goal of being competitive could be to increase market shares. For a nation, increased market share could be understood as its firms' capacity to win new markets and to penetrate existing markets. With regard to a country, we will have to distinguish two kinds of market shares: shares of foreign markets (export market shares) and shares of the domestic market (rate of import penetration).
Export market shares ($MS_{ij}$) for a country $i$ and a product $j$ concern the share of the exports ($X_{ij}$) of product $j$ by firms in country $i$ in relation to world exports of the product or by a reference area (in this case the 25 OECD countries).

$$MS_{ij} = 100 \times \frac{X_{ij}}{\sum_{i} x_{ij}}$$

Traditionally, markets shares were won through international trade, that means, exports. Nowadays foreign direct investment flows, technology transfers and capital movements play an increasing role in obtaining market shares. Those different forms do not only coexist, but also influence each other, e.g. direct investment can generate technology transfers or can enhance imports to the country of origin, if the investment consisted in outsourcing part of the manufacturing process in lower-cost regions. The products are then imported back and can even be re-exported in another form (as finished products) to other countries.

Investment abroad does not always mean that the firm or the country is already competitive. Investment can also be due to the fact that the costs were increasing faster than the ones of the direct competitors. Competitive firms would invest abroad to consolidate their competitive position and benefit e.g. from positive externalities in other countries (highly skilled labour etc.).

Market shares can be influenced by different factors, such as the firms' main strategies (profit maximization and/or increase in market shares), changes in the specialisation pattern of a country, recession in traditional export markets of a country, rapid growth in domestic demand (products will have to satisfy first excess domestic demand).

One comment concerning the method used to measure market shares: the formula suggests that each country's share is calculated as a percentage of the total exports (world or specific area) of that product. In this case, no country could win new market shares without making other countries loose theirs. However, this is not the case since world trade grows even faster than production.

The table below shows growth rates and market shares for exports for the world, developed and developing countries (not included are transition economies in Eastern Europe/Central Asia, developing countries include also South Africa, mature Asian Tigers, China and Asian transition economies like Vietnam). RB means resources-based manufactures (labour-intensive and less important with regard to competitiveness in case of e.g. simple food and leather processing, important for competitiveness if using capital and skill-intensive technologies in e.g. petroleum refining), LT is low-technology manufactures (at least in developing countries normally based on simple technologies and price (e.g. garment, textiles, footwear), MT medium-technology manufactures (e.g. automotive or engineering products) and HT high-technology manufactures, such as software or electronics (characterized by high R&D investments, specialized skills).

### Growth rates and market shares of exports (% per annum)

<table>
<thead>
<tr>
<th></th>
<th>All products</th>
<th>Primary manufactured</th>
<th>RB</th>
<th>LT</th>
<th>MT</th>
<th>HT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>World</strong></td>
<td>Growth 1985-98</td>
<td>8.6</td>
<td>3.4</td>
<td>9.7</td>
<td>7.0</td>
<td>9.7</td>
</tr>
<tr>
<td></td>
<td>Growth 1985-90</td>
<td>8.4</td>
<td>4.4</td>
<td>8.8</td>
<td>7.0</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>Developed</strong></td>
<td></td>
<td>8.7</td>
<td>1.3</td>
<td>12.5</td>
<td>6.0</td>
<td>11.7</td>
</tr>
</tbody>
</table>

© 2005 UNCTAD Virtual Institute on Trade and Development
Developed 14.0  7.9  14.7  12.7  15.4  14.7  16.2  
Developing  9.1  1.3  15.4  4.9  18.4  19.3  26.7  

Growth 1990-95

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>8.2</td>
<td>7.4</td>
</tr>
<tr>
<td>Developed</td>
<td>7.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Developing</td>
<td>12.0</td>
<td>11.3</td>
</tr>
</tbody>
</table>

Growth 1995-98

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>2.1</td>
<td>-0.4</td>
</tr>
<tr>
<td>Developed</td>
<td>1.7</td>
<td>-0.9</td>
</tr>
<tr>
<td>Developing</td>
<td>2.8</td>
<td>0.9</td>
</tr>
</tbody>
</table>

Share of products in world exports, 1985 and 1998

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>100</td>
<td>13.7</td>
</tr>
<tr>
<td>Developed</td>
<td>100</td>
<td>15.8</td>
</tr>
<tr>
<td>Developing</td>
<td>100</td>
<td>32.8</td>
</tr>
</tbody>
</table>

Share of developing countries in world exports, 1985 and 1998

<table>
<thead>
<tr>
<th></th>
<th>1985</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>24.3</td>
<td>26.7</td>
</tr>
<tr>
<td>Developed</td>
<td>25.0</td>
<td>34.5</td>
</tr>
<tr>
<td>Developing</td>
<td>25.0</td>
<td>15.3</td>
</tr>
</tbody>
</table>

The rate of import penetration ($MP_{ij}$) for a country $i$ and a product $j$ corresponds to the share of domestic demand ($D_{ij}$) in a country $i$ for product $j$, which is met by imports ($M_{ij}$).

$$MP_{ij} = \frac{100M_{ij}}{D_{ij}}$$

Competitiveness in domestic markets means that national industries want to win or at least maintain their shares in the own markets. Also in this case, we have to consider both imports and the output of foreign affiliates directed to the domestic market. Foreign production in the country for the domestic market can be calculated by subtracting from total foreign production the proportion that is exported. We have also look at the proportion of input that is imported, since we want to avoid counting those imports twice (once in total imports and the in the foreign affiliates production).

Whether import penetration can serve as an indicator for competitiveness depends very much on particular circumstances. A high level of import penetration could be the result of a country being strongly integrated in the world economy, which tends to lead to higher export market shares. It can be also due to a particularly rapid growth of domestic demand or a substantive depreciation of supplier countries’ currencies. Moreover, the rate of import penetration can vary depending on the size of the country, since small countries are normally more dependent on imports.

What this indicates is that any one of these factors can be misleading on its own as an indicator of competitiveness.

Similarly, strong foreign presence in production is not necessarily a sign of low competitiveness, because it may be the outcome of a policy to attract foreign firms’ capital. In that case, the ability to attract inward Foreign Direct Investment can be an indicator of competitiveness. Under certain circumstances, FDI can bring capital, skills, knowledge, and access to technology and international markets. It may contribute to job creation, upgrading local firms’ competitiveness and increasing living standards. Indicators for the ability to attract inward FDI can be found e.g. in the UNCTAD World Investment Report 2002.
1.4 Trade balances and the export/import ratio

The trade balance (exports less imports) is frequently used to measure competitiveness of a country, a sector or product at national level from a narrow point of view. A complementary indicator is the export-import ratio (exports divided by imports).

Changes in the trade balance or the import-export ratio can be due to improved competitiveness, but they can also be caused by other factors. If, for example, the improvement of the trade balance is the result of more efficient control of production costs or an improvement in innovation, product quality etc., then it does reflect increased competitiveness. However, if e.g. export market demand grows faster than domestic demand, the trade balance will tend to improve.

All the indicators concerning national competitiveness we have looked at until now (cost and price indicators, export market shares and import penetration, trade balances, export-import ratios and FDI) intend to capture a country's ability to sell its products on world markets. That means we focused mainly on competitiveness in international trade, especially in exports. The main strength of these indicators is that they use hard data and that they are at least to some extent comparable across countries. They are based on economic models that can be tested empirically.

Non-price and non-cost factors, such as technology, innovative capacity, infrastructure or quality of distribution networks, however, are not or only indirectly (e.g. through an increase in labour productivity) taken into account. The following approaches to measurement of competitiveness, rankings and benchmarking, try to integrate some of these non-price factors. We move towards a broader definition of competitiveness and therefore also towards a broader perspective of measurement. We will have to critically analyse the strengths and weaknesses of these approaches to measurement of competitiveness.

2. Rankings assessing competitiveness at national level

In this chapter, we will analyse and compare the two main competitiveness reports with rankings at country level: the Global Competitiveness Report (GCR) published by the World Economic Forum and the World Competitiveness Yearbook (WCY), published by the International Institute for Management Development (IMD). Before 1989, both institutions (located in Geneva and Lausanne, Switzerland) published together one single report, but split then, probably due to different views regarding the definition of competitiveness and the criteria their indicators are based on. Both institutions publish competitiveness indices using a composite indicator to rank countries according to selected criteria. Governments and research institutions also tried to come up with competitiveness rankings, but the GCR and the WCY attract certainly the highest attention. They are quoted in policy statements, get considerable press coverage and are used in research and by governments in order to market the national attractiveness in general and to promote inward investment in particular (in case the ranking was good).

2.1 The Global Competitiveness Report

The concept of competitiveness developed by M. Porter was in fact popularised by the World Economic Forum through its Global Competitiveness Program. While Porter has been responsible for the microeconomic issues (the Business Competitiveness Index) Jeffrey Sachs and John McArthur have been in charge of developing the macroeconomic aspects of the ranking (the Growth Competitiveness Index).
The World Economic Forum is a membership based non-governmental organization, which promotes interaction among all stakeholder groups of society e.g. leaders from government, business, academia and the arts with the objective of "improving the state of the world". It pursues its aims by organizing high-level meetings and summits, the largest and best known is its Annual Meeting held in Davos. This meeting brings together over 1,000 chief executives, some 200 government leaders, numerous officials from regional and international organizations, and some 300 experts, scientists, artists, religious leaders and representatives of the media.

The Global Competitiveness Programme claims that this network enables them to identify the most critical factors for development. The two indices that compose the GCR are therefore not only based on hard data, but also on the results of an annual opinion survey that conveys information from business executives and entrepreneurs (ca.8000 respondents). Respondents to the questionnaire are asked to identify key obstacles to economic growth in their countries and to assess the business environment in which they work.

What does the ranking measure as "competitiveness"? Growth and growth rates are the dependent variables when measuring competitiveness. The Growth Competitiveness Index (GCI) aims to measure a country's ability to achieve sustained growth over the medium and long term. It assesses critical determinants for growth and living standards (GDP per capita), based on data and the survey results. The Business Competitive Index (BCI) emphasises the importance of company-specific factors that influence efficiency and productivity at the micro level. Both indices are a weighted average of normalized variables that determine the dependent variable - competitiveness, measured in GDP per capita and the growth rate of GDP per capita.

The Growth Competitiveness Index

According to the Global Competitiveness Programme is the aggregate growth rate the key factor both for developed and developing countries. In developed countries, growth would be linked to higher wages, larger profits, more employment, and expanded business opportunities. In developing countries, growth would help to decrease poverty, reduce infant mortality, improve access to water, sanitation, education, lower female discrimination and child labour and contribute to more freedom, civil liberties and democracy.

The Growth Competitiveness Index places therefore growth in the centre of attention and tries to capture how different factors determine growth.

The three pillars of growth

According to the GCI, economic growth can be summarized with three broader determinants: macroeconomic environment, the quality of public institutions and technology.

a) Macroeconomic environment

Although macroeconomic stability alone will not endure growth, its absence will certainly impede growth. “Firms cannot make informed decisions in environments where the inflation rate is in the hundreds, typically as a result of public finances being out of control. The banking system (which is essential if an economy is to grow in the medium and long run) cannot function if the government runs gigantic deficits (especially if, as a result, it forces banks to lend it money at below-market interest rates). The government cannot provide services efficiently if it has to make enormous interest payments on its past debts. And the business sector suffers unnecessarily if the taxes they pay are wasted away by the government.”

b) Public institutions
Although the GCI points out that wealth is created in the private sector, it highlights the importance of institutions created and maintained by the government. Property rights should be guaranteed by a legal and judicial system. Moreover, companies cannot operate efficiently in environments where contracts cannot be enforced or where the rule of law is weak or nonexistent. The GCI considers therefore the soundness of public institutions as one of the pillars for economic growth and development.

c) Technological progress
In the long run, no growth is possible without technological improvements even if investment in physical, capital and infrastructures is ensured. The reason behind is that innovation and technological progress are considered as the determinant of growth that can circumvent diminishing returns and therefore a slow-down of growth rates.

The three pillars are obviously not totally independent but do interact, e.g. you might need stable public institutions in order to achieve significant technological progress (ensuring e.g. patents, formulating competition policy).

The authors of the GCR point out that one can still analyse the "pillars" in three distinct indices, using again both publicly available data and the outcome of the WEF's executives survey. Together they compose the Growth Competitiveness Index (GCI).

- **Role of Innovation within the GCI**
Technological progress is not achieved in all countries by the same means. In countries that are already close to the technological frontier innovation is the only possibility to advance. Less advanced countries might also progress by adopting or imitating technologies, which has been previously developed.

In order to capture the difference between those two groups of countries, the CGI defines the first one as "core innovator" and the second one (the imitators) as "non-core innovators". The criterion to decide if a country goes in one group or the other is to be over or below "15 patents per million population". Accordingly, innovation is higher weighted for core innovators than for non-core innovators when calculating the rank within the GCI. Technological adoption is weighted positively in case of the non-core innovators and not considered in case of the core innovators.

- **Varying importance of determinants depending on being a core or non-core innovator**
Not only technological progress is weighted differently depending on the fact of a country is a core or a non-core innovator, also the other determinants differ. The authors argue that a stable macroeconomic environment and well-functioning public institutions are more decisive for growth for the non-core innovators, which are at the same time less developed countries, and that growth in core-innovator countries is more likely to depend mostly on technological progress. For that reason, the three sub-indices are weighted equally in case of non-core innovators (0.33, 0.33, 0.33) and technology is gets a higher weight in case of core-innovators (0.5, 0.25, 0.25). The introduction of different weights depending on the degree of innovative capacity and stage of development represents an attempt to adapt measurement techniques to the heterogeneous reality.

You can find the detailed composition of the GCI under:
http://www.weforum.org/pdf/Gcr/Composition_of_Growth_Competitiveness_Index

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How did the GCI change over the years

The Growth Competitiveness Index has been introduced in 2001 and undergoes every year some minor and major changes. The coverage of countries is constantly increasing, last year's ranking included 104 countries. Some of the questions of the executive opinion questionnaire get reformulated and also indicators get replaced, e.g. government expenditure, formerly considered as negative influence so that competitiveness was highest when government expenditure was zero, has been replaced by "government spending waste", trying to capture only the "bad part" of government expenditure. Instead of using hard data as before, they use now results from the opinion survey: "extent of distortive government subsidies", "diversion of public funds" and "public trust in the financial honesty of politicians", three variables that should capture waste through corruption and favouritism.

If changes in indicators occur, the new ranking will not be directly comparable with the one of the last year. However, governments and the press etc. will be primarily interested in knowing if their country moved two positions up or three positions down. For that reason, the WEF team recalculates the old ranking using the new indicators. Obviously, you will get in most cases a change in positions.

You can find the newest and last year's overall rankings as well as some country examples on the website of the Global Competitiveness Programme:
http://www.weforum.org/site/homepublic.nsf/Content/Global+Competitiveness+Programme

The Business Competitiveness Index

While the GCI looks at macroeconomic determinants with medium-term impact analyses the Business Competitive Index current microeconomic conditions and their effects on productivity. The rationale behind the BCI should sound quite familiar, since Michael Porter has developed the BCI: wealth is created at the microeconomic level and macroeconomic factors are important but not sufficient for improving competitiveness.

The BCG examines two main areas the author considers as particularly important for sustained productivity, (i) the sophistication of the operating practices and strategies of companies and (b) the quality of microeconomic business environment. The BCI and its two sub-indices corresponding to the areas named before, is mainly based on results from the executive opinion survey. Hard data is only used for patenting rates and Internet/mobile phone penetration. Measures out of the survey are e.g. extent of staff training, willingness to delegate authority, value chain presence, nature of competitive advantage and others for the sub-index on company operations and strategy. The measures for the sub-index on the national business environment are exactly the four determinants out of Porter's competitiveness diamond: Factor input conditions, demand conditions, related and supporting industries and context for firm strategy and rivalry. You can find the complete list in the report. The coefficients of a multiple regression of the sub-indices on GDP per capita determine their weight within the overall BCI.

The GCI and the BCI are meant to measure complementary aspects of competitiveness. If you compare the ranks of countries in both indices you will see that they are correlated (see figure below).
Comment: What is now called Business Competitiveness Index was formerly called Microeconomic Competitiveness Index and before that Current Competitiveness Index. There are yearly (minor) changes, similar to the ones we highlighted for the Growth Competitiveness Index, but the overall approach remained based on Porter.

Future development of indices: To address important changes in the importance of growth determinants, the Global Competitiveness team is planning to replace in the forthcoming report the current two indices with one new single index: the Global Competitiveness Index that will bring in new factors such as human capital, labour and financial markets efficiency, openness and market size, quality of infrastructure etc., until now not or not enough taken into account.

The scope of the Global Competitiveness Report is however quite ambitious and goes beyond simply the indices and rankings. In each Report, you will find short country profiles, longer country and regional case studies and also papers on selected issues such as "Corruption, Governance and Security", "The Competitive Edge in Environmental Responsibility" or "International Productivity Comparisons: the Importance of Hours of Work" in the 2004 report. Many of these papers are not necessarily written by the Global Competitiveness Programme themselves but by researchers and partner institutes - think tanks, universities etc. around the world. In this way, we can see that their scope moves far beyond conventional economics and into much wider policy areas and concerns that, given the influence and reach of the WEF, are not only shaped by but does also shape emerging global consensus and policy.

It is also interesting to note how the World Economic Forum’s competitiveness output has steadily expanded. The Global Competitiveness Programme has broadened their research and publishes now also regional competitiveness reports (Africa Competitiveness Report, Arab World Competitiveness Report), a Global Information Technology Report, a report about gender issues and a review of the...
European Competitiveness Strategy, the so-called "Lisbon Strategy". There is clearly a market among the business-leaders, governments and policy makers who make up both their clientele and their audience for more and more of this kind of packaged information and data preparation.

**Excursus - The ITC Trade performance Index in GCR 2002-2003**

The International Trade Centre (ITC), belonging to UNCTAD and the WTO, published one of the papers in the 2002-2003 Global Competitiveness Report, where they present the "trade performance index", divided into a "current index", which measures the current level of trade competitiveness in a specific sector, and the "change index", measuring how the competitive position has changed over the last five years. These indices should help measuring the benefits of opening to trade for development and competitiveness. It assesses the trade performance of countries at different stages of development, within specific industries. The table below shows the variables on which the indices are based:

<table>
<thead>
<tr>
<th>Trade Performance Current index</th>
<th>Trade Performance Change Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Share of the country's export sector in world trade</td>
<td>Change of the share of the country's export sector in world trade</td>
</tr>
<tr>
<td>Sectoral trade balance (net exports)</td>
<td>Increase or decrease in the trade balance</td>
</tr>
<tr>
<td>Per capita exports (in order to capture differences in the size of economies)</td>
<td>Degree of specialization in particularly dynamic products in a specific sector</td>
</tr>
<tr>
<td>Level of differentiation of export products in a sector</td>
<td>Change in differentiation of export products in a sector</td>
</tr>
<tr>
<td>Level of diversification of export markets</td>
<td>Change in diversification of export markets</td>
</tr>
</tbody>
</table>

Source: according to GCR 2002-2003; p.308

80 countries are measured and ranked in 14 export sectors. In the detailed assessment of specific countries and industries, the authors follow Porter's "stages of competitive development" and examine countries in the factor-driven stage (labour-intensive and low-technology), the investment-driven stage and the innovation-driven stage.

### 2.2 The World Competitiveness Yearbook

The other well-known competitiveness ranking is the World Competitiveness Yearbook. According to Stéphane Garelli, Director of the World Competitiveness Project and Professor at IMD Business School and University of Lausanne, “The IMD World competitiveness Yearbook (WCY) is the world’s most thorough and comprehensive annual report on the competitiveness of nations”.

Its methodology and target group is quite similar to the one of the World Economic Forum. The ranking of the WCY relies also on hard data (two thirds of weight in final rankings) and survey data (one third), building all together over 300 criteria and analysing 60 countries. Compared to the GCR, the survey outcome counts less in case of the WCY and has the objective to measure issues that are not easily quantifiable (e.g. corruption, quality of life) and as well as the "perception" of competitiveness. The IMD names as target groups the business community that could use the World Competitiveness Yearbook for investment decisions, governments in order to benchmark policies and the academic world that can use the WCY’s data for research on competitiveness issues. Similar to the World Economic Forum, the WCY describes competitiveness both in form of rankings (with the objective of comparing countries’ positions) and country profiles (in order to capture how countries performed, where strengths and weaknesses lie).
The WCY tries to measure the outcome of four competitiveness factors, which define according to the IMD a country’s national environment: economic performance, government efficiency, business efficiency, infrastructure. You will see that it is not always obvious if a criterion is rated as negative or as positive for competitiveness (e.g. employment in public sector - does it or not contribute to competitiveness?). In the 2005 edition, 77 criteria are used to assess economic performance, subdivided into five determinants.

- Domestic economy (such as GDP, government expenditure, investment, gross domestic savings per capita, and "forecasts" of GDP growth, inflation etc.)
- International Trade (e.g. current account balance, exports, imports, tourism receipts)
- International Investment (e.g. direct investment flows abroad, direct investment flows inward, relocation threats of services/R&D facilities)
- Employment (e.g. unemployment rate, part-time employment, employment in public sector)
- Prices (e.g. consumer price inflation, apartment rent)

**Government efficiency** is measured by 73 criteria and subdivided into the following factors:

- Public Finance (e.g. central government foreign/domestic debt, management of public finances do improve, general government expenditure)
- Fiscal Policy (e.g. collected total tax revenues, corporate tax on profits, employer's social security contribution rate, real personal taxes)
- Institutional Framework (e.g. country credit rating, real short-term interest rate, exchange rate stability, political parties - do understand today's economic challenges)
- Business Legislation (e.g. customs' authorities - do facilitate the efficient transit of goods, public sector contracts - are open to foreign bidders, immigration laws - do not prevent your company from employing foreign labour)
- Societal Framework (e.g. personal security and private property, risk of political instability, income distribution, harassment and violence)

**Business Efficiency**: 69 criteria measure the following components of business efficiency:

- Productivity (overall labour productivity and estimates according to sectors - agricultural, industrial and service productivity)
- Labour Market (e.g. unit labour costs, working hours, skilled labour, brain drain, international experience)
- Finance (e.g. credit card transactions, investment risk, availability of venture capital, value traded on stock markets)
- Management Practices (e.g. ethical practices are implemented, widespread entrepreneurship, efficient marketing)
- Attitudes and Values (e.g. flexibility and adaptability high, need for economic and social reforms I understood by society)

**Infrastructure**, measured by 95 criteria, is the fifth determinant of competitiveness and is again broken down into the following factors:

- Basic Infrastructure (e.g. land area, population, density of railroads, air transportation, energy consumption)
- Technological Infrastructure (e.g. investment in telecommunications, computers per capita, number of internet users, high-tech exports, cyber-security)
- Scientific Infrastructure (e.g. expenditure in R&D, Nobel prizes, scientific articles, patents)
• Health and Environment (e.g. life expectancy, health expenditure, Human Development Index, recycling rate, pollution problems)
• Education (e.g. public expenditure on education, secondary/tertiary enrolment, illiteracy)

Each of the 20 presented sub-factors gets a 5% weight in the overall consolidation of results. There is no differentiation between countries at different stages of development and weights are not calculated following a growth accounting exercise, as it is the case in the Global Competitiveness Report. Compared to the GCR, the IMD places more emphasis on cultural and social factors as determinants of competitiveness. Criteria used to reflect that are e.g. image abroad, national culture (open to foreign ideas) or attitude toward globalization (positive in you economy). These criteria are all extracted from the opinion survey. According to the WCY, competitiveness cannot be reduced to growth (GDP) and productivity (as it is in case of the World Economic Forum). However, it remains unclear what they choose as concrete alternative to growth and productivity as measure of competitiveness.

Another difference to the Global Competitiveness Report is the integration of regions in ranking and profiles. According to the IMD, makes sense to compare regions such as Bavaria, Rhone-Alps, Zhejiang or Maharashtra with each other but also with the 60 countries included in the ranking. The introduction of regions is based on the fact that regional competitiveness can have different sources than national competitiveness and that more independent regions promote actively their competitiveness regardless of national policies. Moreover, regions can develop to "engines" of competitiveness within a country, which is e.g. the case for Catalonia in Spain. If data is only available at national level, a proxy is calculated for the regions based on either the their ratio in national GDP or their ratio in total national population.

An interesting point of the WCY's country profiles is the integration of a "simulation", where a country's weakest criteria values are replaced by average values of all countries in order to examine the impact of specific policies on the competitiveness rank.

We have seen how the two "competing" rankings from the WEF and the IMD are constructed and on which main factors they are based. But do they come up with similar results in their rankings? We will compare the 2004 rankings since the GCR is published in autumn whereas the WCY 2005 is already available.

**Top 25 comparisons in 2004**

<table>
<thead>
<tr>
<th>Rank</th>
<th>GCR Growth Comp. Index</th>
<th>GCR Business Comp. Index</th>
<th>WCY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Finland</td>
<td>United States</td>
<td>United States</td>
</tr>
<tr>
<td>2</td>
<td>United States</td>
<td>Finland</td>
<td>Singapore</td>
</tr>
<tr>
<td>3</td>
<td>Sweden</td>
<td>Germany</td>
<td>Canada</td>
</tr>
<tr>
<td>4</td>
<td>Taiwan</td>
<td>Sweden</td>
<td>Australia</td>
</tr>
<tr>
<td>5</td>
<td>Denmark</td>
<td>Switzerland</td>
<td>Iceland</td>
</tr>
<tr>
<td>6</td>
<td>Norway</td>
<td>United Kingdom</td>
<td>Hong Kong</td>
</tr>
<tr>
<td>7</td>
<td>Singapore</td>
<td>Denmark</td>
<td>Denmark</td>
</tr>
<tr>
<td>8</td>
<td>Switzerland</td>
<td>Japan</td>
<td>Finland</td>
</tr>
<tr>
<td>9</td>
<td>Japan</td>
<td>Netherlands</td>
<td>Luxembourg</td>
</tr>
<tr>
<td>10</td>
<td>Iceland</td>
<td>Singapore</td>
<td>Ireland</td>
</tr>
<tr>
<td>11</td>
<td>United Kingdom</td>
<td>Hong Kong</td>
<td>Sweden</td>
</tr>
</tbody>
</table>
Both rankings are based on hard data and executive opinion surveys, but there are considerable differences in the results. Some examples:

- Top 10: only 5 countries are in both rankings (Growth Competitiveness Index and WCY) ranked below the first 10.
- 7 countries under the 25 of the Growth Competitiveness Index are not in WCY under first 25.
- Japan is ranked 9th in the GCI and 23rd in the WCY - 14 positions of difference.
- In the Business Competitiveness Index, which assesses the current position, Germany is ranked 3rd whereas it gets only on the 21st position in the WCY.
- Big industrialized countries such as France, Spain and Italy are not under the first 25 in all three rankings (only Spain 23rd in GCI, France 12th in BCI).

It is therefore important to have a closer look at the ranking and to examine critically statements such as "Finland ranked as most competitive country in the world!"

In spite of the similarities, we have to take account of the differences in the two rankings - regarding the choice of indicators, the relevance of a long-term view in case of the GCI, the different statistical approaches in consolidating the results for individual factors etc.

### 2.3 UNIDO scoreboard


Because of the analytical weaknesses of rankings such as the GCR and the WCY that we will examine in Chapter 2.4, UNIDO decided to focus on industries (manufactures) instead of providing rankings for the competitive position of the whole country, and to base the ranking exclusively on hard data. It represents therefore a kind of compromise between the "hard" macro- and microeconomic indicators presented in the first chapter of the module, and the very broad and more qualitative rankings from WEF and IMD. The scoreboard is a tool to assess a country's position with respect to industrial performance. The goal is to benchmark the own position against comparable but "better performing" countries in order to learn how to improve. Benchmarking has first been used by companies to learn
from "best practices" and to assess their own performance. Similar to the competitiveness concept as a whole, it spread then to government agencies, research institutes and academia.

**The competitive industrial performance index**

The competitive industrial performance index gives information about the national ability to produce manufactures competitively. It is based on four indicators (newer version, 2004), the first being Manufacturing value added (MVA) per capita. This indicator shows the country's level of industrialization but does not capture e.g. the role of manufacturing activity for the national economy or its technological structure. Therefore, three more indicators are used: manufactured exports per capita, industrialization intensity (simple average of the share of MVA in GDP and the share of medium- and high-tech activities in MVA) and export quality (simple average of the share of manufactured exports in total exports and the share of medium- and high-technology products in manufactured exports. The composite index is calculated as simple average of the four indicators (standardized to range from 0 to 1) and there are no weights assigned a priori.

It is interesting to analyse how the ranking result changes if we look first only at the base indicator (MVA per capita) and add then successively the remaining three indicators. In the 2002/2003 ranking, the United States, for example, ranks only 7th in per capita MVA (year 1998), even if it is the largest industrialized country by total value of production and exports. If we then add per capita exports, it even falls to the 13th rank, since domestic demand is higher compared to other industrialized countries. When the indicators of medium- and high technology in MVA and exports are added, its rank improves considerably, underlining the relative technological strength of the United States.

The technological structure of exports seems to be in general the indicator with the highest impacts on changes in position, except from the group of least developed countries that rank in the bottom of the scoreboard also if it is based solely on MVA per capita. Most "winner countries" that gained 10 or more positions from 1985 to 1998, it seems that the entry into higher-technology global production systems has been an especially important element in industry. Nevertheless, it is important to highlight that this strategy does not always lead to sustainable success in upgrading technology within the country. If the country only achieves to do the final assembly of high-tech products, it will not develop local capabilities, although exports in high-tech manufactured products will rise. In general terms, doing little will make countries to loose ranks, large improvements at relatively high levels are due to the integration in high-technology production systems. At lower levels, a raise in only one component of the index can already cause improvements. A sudden decrease in position is normally due to external shocks or macroeconomic problems.

It is possible to identify clusters of countries that show similarities over the three base years (1980, 1990 and 2000 in the 2004 report). In the figure below, you see how the clusters' performance with regard to (i) the share of medium- and high-technology products in MVA and (ii) the share of MVA in GDP can be visualized. One bubble corresponds to one cluster, the size of the bubble shows the average value of MVA per capita for each country group and the arrows show the evolution over time.

The report provides also a ranking of the structural features, the drivers of industrial performance. UNIDO decided to limit the analysis to the following key variables: skills (secondary and tertiary enrolment rates), local technological effort (R&D financed by productive enterprises), inward foreign direct investment, licensing payments abroad (royalties) and physical infrastructure (telephone lines, mobile phones, computers and internet since data on traditional infrastructure such as railways, roads, ports and water supplies are not always available. The following graphs show both the competitive industrial performance index and the results for the key drivers.

Benchmarking the drivers of industrial performance

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Correlation of drivers

The chosen drivers are positively correlated, but strength and significance of the correlation can vary and, importantly, correlations do not reflect causal links, although they can indicate indirect ones, e.g. through higher incomes. In general, the correlations suggest that drivers do rather complement than offset each other and that industrial development needs all drivers. The report highlights however, that depending on the stage of development, countries might need different combinations of drivers and have to set different priorities.

The relationship between industrial performance and the drivers

Using multiple regression analyses, the report examines the relationship between the competitive industrial performance index (dependent variable) and the drivers (independent variables) in 85 countries. A dummy variable has been introduced in order to control for differences due to levels of development. For 1998, the result was the following one:

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Standard coefficient</th>
<th>t-statistic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills</td>
<td>0.130</td>
<td>1.822</td>
</tr>
<tr>
<td>Research and development</td>
<td>0.466</td>
<td>8.846</td>
</tr>
<tr>
<td>FDI</td>
<td>0.183</td>
<td>3.379</td>
</tr>
<tr>
<td>Royalties</td>
<td>0.253</td>
<td>5.986</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>0.196</td>
<td>2.018</td>
</tr>
<tr>
<td>Development dummy variable</td>
<td>-0.024</td>
<td>-0.401</td>
</tr>
<tr>
<td>Adjusted R²=0.881</td>
<td>Adjusted R²=0.809</td>
<td></td>
</tr>
</tbody>
</table>


The independent t variables are positive and significant, except the dummy variable and R&D seems to be the most important driver.

How to use the scoreboard

If you want to use the scoreboard for the formulation of a competitive industrial strategy, you will have to:

**1. Identify main comparators** that can serve as a benchmark for your country. These can be neighbours with similar advantages and disadvantages, immediate competitors in important industries (the Brazilian automobile industry competes, e.g. with Mexico but also with European and Asian countries), potential competitors (for many countries e.g. China in technology-intensive industries) and the fourth option would be role models, i.e. more advanced countries which can provide best practice experience.

**2. Compare the country's competitive industrial performance index** with the comparator's one, evaluating each indicator separately.

**3. Benchmark drivers** in a third step in order to identify strengths and weaknesses as well as the most critical constraints.

The scoreboard can give a first impression but it must certainly be complemented by further analysis in order to be able to formulate policies. Policies, institutions, and many other factors that are not considered in the ranking have to be examined - that is exactly the job we will have to do in the next module, module 4. Taking all possible information into account, it will be however more difficult to quantify competitiveness in order to directly benchmark countries, since data will be often too heterogeneous and the analysed phenomenon of competitiveness will become more and more complex.

We will now go into the critique of rankings as competitiveness measure. The critique is not applicable to all three presented rankings to the same degree. The UNIDO Scoreboard definitely tries to avoid some of the problems that characterize the GCR and the WCY, but does also not include qualitative indicators of competitiveness.

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2.4 Critique of the use of rankings as competitiveness measure

There is a vast array of critiques to be addressed to the various rankings of competitiveness defined above. Stéphane Grégoir and Francçoise Maurel from the French National Institute of Statistics and Economic Studies (2003) as well as Sanjaya Lall, Professor in Development Economics at Oxford University (2001), contributed importantly examining and criticising rankings. Most of the following critique focuses on the Global Competitiveness Report, not because the WEF’s approach is weaker than the one from IMD, but due to the fact that the exact and detailed methodology of the IMD is not published. Some of the critique is however applicable to both.

First, there is critique concerning the general approach of measurement, i.e. the choice of Composite indices (GCR):

- The WEF chose a model based on growth theory, without however referring to the different existing economic models and prior empiric applications and their econometric problems, e.g. cross-country regression analyses. The choice of the determinants of growth is done "a priori".
- The way, how indices combine the large range of individual indicators is not transparent. It is doubtful that the combination of hard data and survey results fulfils scientific integrity (also case of WCY).

Within the indices, the teams working on the rankings had to define individual variables.

Variables are problematic in both rankings (GCR and WCY):

- Choice of explicative variables, e.g. the degree of impact of public expenditure or the quality of institutions on the GDP is not evident and proven. There has been made the assumption that the chosen variables do have an impact on GDP.
- Quality of measurement of variables: Human capital, for example, is measured by enrollment rates (secondary and tertiary education), a measure whose significance is arguable.
- Causality: Some variables may be correlated with income without being its cause - are "demanding regulatory standards" a cause of a higher living standard or an effect?
- Weights assigned to the variables: weights are either established a priori (e.g. in WCY 0.05 for each sub-factor) or in order to maximize the correlation with the dependent variable (in case of Business Competitiveness Index).
- Problems with variables based on survey data:

  If we look at the indicators of variables from the survey, we will see that it is difficult to get a precise measurement. The following examples are taken from the WCY 2004:
  
  o For the variable Bribing and corruption the indicator would be: "do not exist in the economy". Is there any country with zero corruption in the world? All countries would have to answer "no", may it be Norway or Angola. It is also questionable if some respondents are not also themselves involved in bribing, if that is common in the country. The negation in the question leads to additional confusion.
  
  o Tax evasion - does not hamper business activity: this can, depending on the culture of the respective country, include a wide range answers. Tax evasion might even be very attractive for businesses and hamper more the government's activities than the business activity.
  
  o Central bank policy - has positive impact on economic development: in the short term, in the long-term? Is it always possible to assign economic development to the actions of one institution?
o Political parties - do understand today's economic challenges. What, if there are no actions that follow the understanding?
o Transparency - satisfactory. Satisfactory transparency can mean little transparency, if the responding person has an interest in maintaining transparency low.
o Justice - is fairly administered in society. "Fairly" is too imprecise, it depends then on the culture of a nation and its legal system's history.
o Social cohesion - is a priority for the government
o Quality of life - high: what is quality of life?

Survey questions
As we can see, survey information is often incomplete and there can be biases in the answers due to e.g. imprecise questions. The survey questions have to be clear and unambiguous so that respondents in different countries can interpret them in the same way. Moreover, respondents have to have enough information to answer, so that the answer can be used in comparison with other countries. These conditions are not always satisfied in case of the GCR and the WCY.

Examples for survey questions (GCI, Technology Index 2004):
- What is your country's position in technology relative to world leaders?
- Companies in your country are not interested/aggressive in absorbing new technology? (Note the confusing negation in this question...)
- What is the extent of business collaboration in R&D with local industries?
- Is foreign direct investment in your country an important source of new technology?

Government waste variable:
- Is the composition of public spending in your country wasteful, or does it provide necessary goods and services not provided by the market? (Note: yes/no question with both options)

Survey sample
Another critique concerning the survey as part of the index would address the sample. It is not exactly clear how the sample is selected. Are the respondents at the same time the audience? Do they change over the years? Are they representative (gender, ethничal groups, SMEs versus big companies/MNCs etc.)?

Changes in variables hamper the comparison over time
As highlighted in the paragraph on the Global Competitiveness Report, there are often changes in variables, survey questions and even the underlying assumptions with regard to weights of variables and definition of indices themselves. Changes are understandable as the authors try to follow the latest developments in economic theory or management research. But it means that there is no continuity in the statistical series they use and that it is therefore risky to use their yearly ratings as strong benchmarks.

Are rankings useful from a developmental point of view?
The authors of competitiveness rankings claim that the reports are targeted at businesses, research institutions and governments in both developed and developing countries. If we look again at competitiveness from the developmental point of view, we have to ask, if rankings can be useful for developing countries.
Sanjaya Lall points out in his critique, that the WEF approach is not fully applicable to developing countries. According to Lall, the view of processes and constraints to structural change in developing countries is oversimplified, based on the assumption that markets are efficient and that therefore proactive measures of the government should not be taken into account. Market failures require however especially in developing countries, selective and targeted policies. We already highlighted that the WEF changed only in the last GCR the variable of government expenditure and admitted that the assumption that zero government expenditure is the optimum for competitiveness cannot be supported by evidence.

Other assumptions are also not favourable for sustainable development: labour laws that facilitate hiring and firing are considered as positive while union power has a negative effect on competitiveness according to the WEF index. Market failures are not considered, for example with regard to innovation and learning. Moreover, countries achieve higher ranks for freer trade and stronger intellectual property protection, a fact that ignores completely arguments in favour of interventions in order to protect e.g. infant industries.

The index itself is thus not a tool that can be easily applied to developing countries, since their specific problems and constraints are not taken into account. A way of compensating that weakness might lie in some of the additional thematic papers published in every GCR.

Also UNIDO's competitive industrial performance (CIP) index is not directly related to poverty reduction. Poverty-reducing functions can be found in industries that give employment to unskilled workers to enhance income generation for people below the poverty line. However, there is no correlation between competitive industrial performance (measured by the CIP index) and employment and income growth in low-skill industries. There could be indirect contributions to poverty reduction, under the assumption that competitive industrial performance is linked to growth and growth to poverty reduction.

**Conclusion**

We have analysed throughout this module different measures and indicators of national competitiveness and we have examined their strengths and weaknesses. Obviously, there is no ideal indicator for competitiveness. Depending on your definition of competitiveness it will make sense to look at narrow indicators or at broad indicators, having always in mind what they can measure and where are their limits.

In order to get a broad picture of competitiveness and, what is important, to assess the potential competitiveness, not only the static competitiveness at a certain moment, we will have to go deeper in the analysis of the drivers the determinants of competitiveness. The UNIDO report integrated part of that analysis in their work, since they do not only present their (static) scoreboard but also an assessment of selected determinants of competitiveness.

In the following module we will go deeper into the analysis of determinants.

**Key Readings:**


This OECD paper presents the most important quantitative indicators, such as price and cost indicators, export market shares, import penetration and trade balances.
The authors assess strengths and weaknesses of real exchange rates based on consumer prices, based on unit labour costs and based on export unit values as indicators of competitiveness.

Paper in French about competitiveness in general and examples are mainly taken from Europe. The paper aims particularly to assess the French competitive position. The important section for this module is Complement A on competitiveness indices. The measurement is also addressed in the main paper, chapters 1 and 2.

The reports present the rankings, include individual country profiles and additional papers linked to competitiveness, and give an analysis of the state and the evolution of competitiveness at global level. They should be used for the activities and contain information about current issues of the international economic agenda.

The structure of the IMD reports is quite similar to the WEF reports; it does not include individual papers on specific subjects.

Lall analyses in this paper the value of composite competitiveness indices and examines the WEF’s Global Competitiveness Report. His detailed analysis of the indices cannot be fully applied to the current reports, since the composition of the indices went through important changes since 2001. The general critique however is still valid.


The report presents benchmarking as one possible approach to measuring industrial competitiveness and industrial performance. It enters also into the assessment of the drivers of industrial competitiveness, adding therefore a dynamic perspective to their benchmarking exercise. Relevant for this module is Part 1 of the report. The further development of the index can be found in UNIDO (2004): *Industrialization, Environment and the Millennium Development Goals in Sub-Saharan Africa. Industrial Development Report 2004.*
Activities Module 3

Activity 1: Macroeconomic and Microeconomic Indicators

Objectives:
Be able to analyse given graphs and figures and to draw conclusions with regard to the implicit information on competitiveness.

Instructions:
1. Exchange rates
The following graph shows Benin’s real exchange rates against the French Franc (then Euro), the US Dollar and the Nigerian Naira, 1990 = 100.
- What does a rise mean for Benin’s relative competitiveness?
- Can you think about what happened in 1994? (Note: devaluation of Benin’s currency)
- Try to find possible explanations why the exchange rate against the Franc/Euro and the US Dollar remained quite stable over time but very volatile against the Nigerian Naira? (Note: high and variable inflation in Nigeria and fluctuations of the nominal naira)

2. Export growth and export market shares
The following graph, already presented in the corresponding chapter in the handbook, shows export growth rates and market shares for the period 1985 to 1998.
- What products grew the slowest, what products grew the fastest?
- Compare overall and product class specific growth rates for developed and developing countries.
- Comment developing countries’ shares in world exports and their evolution.
- What do the figures suggest about the drivers of export performance and therefore, if we stay within this indicator, competitiveness?

Export growth rates and market shares (% per annum)

<table>
<thead>
<tr>
<th>3.2</th>
<th>All products</th>
<th>Primary</th>
<th>All manufactured</th>
<th>RB</th>
<th>LT</th>
<th>MT</th>
<th>HT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>World</td>
<td>8.6</td>
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<tr>
<td></td>
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<td>1.3</td>
<td>12.5</td>
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<tr>
<td></td>
<td>Growth 1985-98</td>
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<tr>
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</table>


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Developing 9.1 1.3 15.4 4.9 18.4 19.3 26.7

Growth 1990-95
World 8.2 4.4 8.9 7.4 8.3 7.8 13.2
Developed 7.0 4.9 7.2 6.2 6.2 6.6 10.1
Developing 12.0 2.7 15.3 10.3 11.3 16.6 25.4

Growth 1995-98
World 2.1 -1.9 2.7 -0.4 1.8 2.5 6.1
Developed 1.7 -2.3 2.2 -0.9 1.4 2.0 5.6
Developing 2.8 -1.1 3.5 0.9 2.2 3.1 7.0

Share of products in world exports, 1985 and 1998

<table>
<thead>
<tr>
<th>Year</th>
<th>1985</th>
<th>1998</th>
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<tr>
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<td>30.2</td>
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<td>12.4</td>
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</table>

Share of developing countries in world exports, 1985 and 1998

<table>
<thead>
<tr>
<th>Year</th>
<th>1985</th>
<th>1998</th>
</tr>
</thead>
<tbody>
<tr>
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<td>8.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10.7</td>
</tr>
</tbody>
</table>


3. Unit labour costs
The table below shows levels of unit labour costs in four different years.

- How did the cost position of the United States evolve relative to main OECD trading partners? What can be the reasons for this development of Relative Unit Labour Costs? (note: lower relative labour compensation levels with at the same time increasing productivity, depreciation of the US Dollar against major OECD currencies after 1987).
- Japan started with an important cost advantage. Can you imagine why the country lost nevertheless its cost competitiveness after 1985? (Note: e.g. relatively slowly increasing productivity but rapid appreciation of the Yen)

**Relative levels of unit labour costs in manufacturing**
(USA = 100)
Based on 1990 PPPs

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<tbody>
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<td>United States</td>
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<td>100</td>
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</tr>
<tr>
<td>Japan</td>
<td>91</td>
<td>74</td>
<td>116</td>
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</tr>
<tr>
<td>Germany&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>144</td>
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<td>France</td>
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<td>38</td>
</tr>
<tr>
<td>Netherlands</td>
<td>131</td>
<td>65</td>
<td>122</td>
<td>120</td>
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<tr>
<td>Spain</td>
<td>74&lt;sup&gt;b&lt;/sup&gt;</td>
<td>49</td>
<td>108</td>
<td>100</td>
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<tr>
<td>Sweden</td>
<td>144</td>
<td>82</td>
<td>158</td>
<td>160</td>
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<tr>
<td>Chinese Taipei</td>
<td>40</td>
<td>41</td>
<td>70</td>
<td>70</td>
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</table>

<sup>a</sup> West Germany
<sup>b</sup> 1977

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4. Inward FDI
The table below shows foreign direct investment inflows by country group, income level and region.

- How did FDI inflows evolve between the two periods (1981-1985 and 1993-1997) around the world?
- What country group and what region experienced the highest FDI growth? From your previous knowledge - are those the most dynamic and increasingly competitive regions? What country group/income level and region has seen a decrease in world or developing country FDI?
- In which region are per capita inflows the lowest? What region has a relatively high share in world and developing economies’ FDI but a relatively low per capita inflow? What does tell us more about competitiveness: the share or the per capita inflow?

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<tbody>
<tr>
<td></td>
<td>Average value (millions of dollars)</td>
<td>World shares (percent)</td>
</tr>
<tr>
<td>World</td>
<td>56,375.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Industrialized economies</td>
<td>42,141.8</td>
<td>7.5</td>
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<tr>
<td>Transition economies</td>
<td>ni</td>
<td>ni</td>
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<tr>
<td>Developing economies</td>
<td>13,833.6</td>
<td>24.5</td>
</tr>
<tr>
<td>High and upper-middle income</td>
<td>9,676.4</td>
<td>17.2</td>
</tr>
<tr>
<td>Lower-middle Income</td>
<td>2,105.2</td>
<td>4.4</td>
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<tr>
<td>Low income</td>
<td>1,852.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Low income (without China and India)</td>
<td>657.7</td>
<td>1.2</td>
</tr>
<tr>
<td>Least developed countries</td>
<td>41.1</td>
<td>0.1</td>
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<tr>
<td>East Asia</td>
<td>6,096.5</td>
<td>10.7</td>
</tr>
<tr>
<td>East Asia (without China)</td>
<td>5,104.3</td>
<td>9.1</td>
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<tr>
<td>South Asia</td>
<td>196.6</td>
<td>0.3</td>
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<tr>
<td>Latin America and the Caribbean</td>
<td>4,091.1</td>
<td>7.3</td>
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<tr>
<td>Latin America and the Caribbean</td>
<td>3,194.2</td>
<td>5.7</td>
</tr>
<tr>
<td>Middle East</td>
<td>108.7</td>
<td>0.9</td>
</tr>
<tr>
<td>Middle East and North Africa and Turkey</td>
<td>107.1</td>
<td>0.9</td>
</tr>
<tr>
<td>Africa and Turkey</td>
<td>2,905.7</td>
<td>5.3</td>
</tr>
</tbody>
</table>


Activity 2: Rankings (GCR and WCY) - surveys
Objective: Examine surveys with regard to the sample of respondents and the formulation of questions.

Instructions:
- Propose how you would construct the sample of respondents for the Growth Competitiveness Index. Would it be the same for the Business Competitiveness Index?
- Examine the Composition of the Growth Competitiveness Index. Choose four survey questions and discuss if (i) they are an adequate indicator and (ii) if the formulation is clear. Would you make suggestions with regard to additional indicators, additional questions? Would you suggest changes in questions to avoid biased answers etc.?

Activity 3: Rankings (GCR and WCY) - evaluation
Objective: Know how to use and interpret rankings and country profiles. Test rankings against previous knowledge about different countries' competitive position. Be able to detect differences in rankings and to explain them.

Instructions:
- Analysis of last year's rankings. Did you expect the countries approximately in the assigned position? Are there any ranks that surprise you, and if yes, why?
If you have access to the whole report: look at two country reports of "surprising" countries. What are the key factors in defining the given rank?

Choose a country and compare its rank in the GCR and the WCY. Examine then the more detailed country profiles and try to extract the reason for the differing positions.

**Activity 4: Benchmarking (UNIDO scoreboard)**

Objectives:
- Know how to use the scoreboard
- Be able to identify constraints and strengths in drivers of industrial competitiveness

Instructions:
- Take your country e.g. to do a benchmark analysis. Which countries would you choose as comparators? Why?
- Choose one important industry in your country. Would you choose the same countries you have decided on in the first part of the exercise or would you take another country?
- Look at the position your country got in the competitive industrial performance index (1998). (The full Industrial Development Report can be downloaded at [http://www.unido.org/en/doc/24397](http://www.unido.org/en/doc/24397) and you find the index on page 177). Analyse possible changes in position depending on the level of aggregation of indicators (only MVA, also manufactured exports per capita...). How does the selected comparator rank?
- Now go into the rankings of the drivers (p. 167 to 176) - what seems to be the weakest driver, what the strongest one? How is the position compared to your benchmark country?
References Module 3


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Determinants of competitiveness cover a very broad field; most economic, social and political theory would have to be integrated in order to achieve a comprehensive view of all facets of competitiveness. That is obviously a difficult if not impossible undertaking and we would risk being limited to a very superficial analysis.

Factors can be external and therefore outside of the control of both policy makers and national firms, such as the world demand or the evaluation of world interest rates. Classical determinants of inherited factor endowments such as natural resources, but also influences as e.g. demography, geography and climate cannot be directly "managed". Sometimes, these are even the most important factors, such as hunger catastrophes, desertification, droughts, the consequences of earthquakes, of war etc. However, actors can, for example, take decisions on the exploitation and the use of natural resources as well as creating policies and enterprise commitment with regard to environmental issues.

When analysing the competitive position of a country, you should consider these factors and estimate their importance in comparison to other determinants that can be influenced by the government, by the business sector, by civil society or the international community. If external factors are not the key bottlenecks for competitiveness, you can focus more place more emphasis on factors that are internal to a nation or an economy and can be influenced. The room for manoeuvre is also here sometimes very limited, e.g. in the case of cultural influences, or the demographic structure of a population. In other cases, particularly at the macro-, meso and microlevel, there is more space for an active enhancement of competitiveness. We have to remember that it is not easy to quantify the impact of a specific determinant on competitiveness. Moreover, we have to take into account that not all determinants are always of the same importance for all countries. The priority in enhancing these factors depends on the stage of development, but also on historical and cultural aspects.

You will find below a list of determinants and guiding questions that can help in your analysis of different determinants' impact on competitiveness. The list does not pretend to be complete. Depending on the importance of the determinant in a specific case, you will have to ask more questions and to examine the possible requisites and consequences for competitiveness more exhaustively.

It is fundamental to always keep in mind that in real world determinants cannot be neither examined separately nor analysed in a static way, since they are interdependent, they influence each other and can therefore also change over time.
1. The Metalevel Determinants

The underlying socio-cultural factors: cultural-economic interactions, the role of trust and social capital

- What do you consider as most important values in your country? Do you think they are widely shared - public sector, private sector? E.g. entrepreneurship: are businesspeople enjoying respect and social prestige?
- Is it a society primarily based on norms, on trust, on both?
- Analyse briefly the kind of social capital that exists in your country: is it more formal (e.g. policy networks, companies, expert groups) or informal (e.g. family relations, religious communities), more horizontal (actors of equivalent status and power, such as neighbourhood associations or cooperatives) or vertical (actors in asymmetric hierarchy and dependence relationship)
- Can you determine any negative effects of social capital on competitiveness? (Lobby-building, exclusion, individual success constrained

**Formulation of strategies and policies - commitment and capability of actors**

- "Political legitimacy is a key-prerequisite for competitiveness on a long term basis" - do you agree with this statement?
- Are there effective means and channels of communication and negotiation between (local) government and private sector? Is the private sector consulted in policy decisions?
- Do actors agree on competitiveness goals and strategies or are there competing views?
- How would you assess the advanced economic, management and information technology skills of the government/ the technological and marketing capabilities of the private sector?

**Openness, integration and policy space**

- What are the risks, what are the benefits of openness and integration into the global trade and monetary systems? What strategy of opening up did your country choose?
- "The ability of Governments to pursue the most suitable development policies should not be unduly constrained. The ITS [International Trade System] needs to allow for legitimate policy space necessary for developing countries to pursue a proactive, strategic mix of trade and development policies suited to initial conditions, dynamic comparative advantage and changing needs and circumstances. It is for each Government to evaluate the trade-off between the benefits of accepting international rules and commitments and the constraints posed by the loss of policy space." (UNCTAD secretariat, 2004)

Do you share the view expressed in the quotation above? How would you assess the policy space in your country with regard to integration into the international trade system, but also FDI, the monetary system etc.?
2. **The Macro- and Mesolevel Determinants**

**Political stability**

Civil conflict, domestic political violence or international disputes hinder or even impede the implementation of competitiveness policies. Instead of spending money on education or infrastructure, governments decide to increase defence expenditures. Capable people in the government become crisis managers instead of dealing with economic management. Negotiations with international aid organisations can have a higher priority than the dialogue with the private sector, labour unions or trade promotion agencies. The reputation of the country and its attractiveness to foreign investors interested in long-term investment normally suffer in case of conflicts and general political instability.

Domestic exporters will be similarly affected by political uncertainty. Country reputation as determinant of competitiveness should not be neglected; it can take decades and a lot of money to rebuild it.

**The role of the government, governance and institutional development**

- Markets and market-enhancing policies are considered as most efficient in allocating resources. What role do however selective and prioritised policy actions play in the case of market failures or imperfections (e.g. underinvestment in R&D or education by business), government failures (e.g. through unnecessary regulations), and system failures (e.g. coordination of the complex science, research, technology and human resource systems that have to be built up and maintained to strengthen innovation? Adopting and implementing strong competition policy to prevent firms from reducing competitive pressures on production, enhance innovation, and ensure that benefits with consumers is another important element. Does the government fulfil its role of providing goods and services that are not/insufficiently provided by the market?

- How transparent and efficient is the policy-making process? Are rationales and objectives behind specific policies clearly articulated? Is the private sector, for example, informed and involved in the policy making process? Is the government aiming to develop and diffuse best policy practice, and to improve policy co-ordination across all areas and levels of government (national, regional, local)? Are there feedback mechanisms that enable to integrate results of the monitoring and evaluation of policies into the adjustment of existing policies and the design of new ones?

- Does the government streamline laws, regulations and permits, being committed not to let them stand in the way of business? Are regulations systematically reviewed? Are regulations applied in a non-discriminatory and efficient way? Or is there a dense web of laws, regulations and permits which make doing business difficult? What is the role of local governments in simplifying regulations?

- How stable are legal and political institutions?

- Competitiveness involves normally different ministries and institutions - is there a coordinating mechanism for all competitiveness-related issues?

- Is public employment highly rent-seeking? How is the remuneration, the recruitment process?

- Are there political pressure groups and what role do they play?

- Is there a tendency to consider bribes/corruption part of both the work in the government, the private sector, the legal sector?
• Is the judiciary independent? Are there alternatives to formal lawsuits such as mediation and arbitration? How costly and lengthy are legal procedures in general?

**Exchange rates, monetary policy and the financial sector**

We have analysed exchange rates as macroeconomic quantitative indicator for international (price) competitiveness. The following questions could help to have a closer look at exchange rates as determinant of competitiveness and the answer the overarching question “Do exchange rates reflect market prices or can governments use them actively as policy tool to influence international price competitiveness? And if the latter is the case - is a long-term currency undervaluation a solution to maintaining a country competitive?”

**Tips:**

Review exchange rates – nominal and real exchange rate, currency appreciation/depreciation, currency devaluation, free floating rates, fixed (pegged) rates, pegged float/managed float with the options "crawling bands" (the rate can fluctuate in a band around a central value, which is adjusted periodically depending on economic indicators), "crawling pegs" (rate is fixed and adjusted as above) and "pegged floats with horizontal bands" (currency can fluctuate in a fixed band that is > 1% around a central rate.

**Global Monetary System**

• How is exchange rate policy linked to other policies – budgetary, monetary, fiscal?

• How are the global trade and the global monetary system linked, are there similarities, differences? (e.g. what happened during Asian crisis and Latin American currency slumps to both monetary and trade issues)

**Exchange rates**

• How does the process of integration into global trade and monetary systems, increased flows of goods and capital influence the national exchange rate policy?

• What are advantages and disadvantages of different exchange rate policies? Give examples.

• What is the risk of subsequent devaluations?

• What would a "competitive" exchange rate look like? Undervaluated? Stable?

**The Financial System - Financial Integration and Financial Markets**

Financial integration and therefore increased and often more volatile capital flows can have a direct impact on exchange rates. In general, shortcomings in the financial system are often an obstacle to competitiveness. Important issues are:

• The degree, phasing and speed of *opening of the capital account* (opening only after trade liberalization and liberalization of the internal financial market)

• *Financial regulation and supervision* (e.g. are interest rates liberalized, how and when does the government intervene, impact on interest rates)

• *Ownership and structure* of the financial sector (e.g. advantages and disadvantages of public banking, foreign owners, specialized banks) and the

• *Access to capital*, particularly in the case of SMEs (e.g. what role do the Basle II agreements on banking sector capital requirements play, can microfinance be a solution?).

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It is important to provide incentives so that domestic or foreign capital flows are channelled into savings or investment that supports the development of production capacity. The challenge is here to develop domestic financial institutions and instruments: to prevent financial bubbles, adverse selection or moral hazard and regulations to avoid a high volume of external funds to go into high-risk credits, for example. Moreover, there should be segments of the financial market that enables innovative investment and long-term investment projects in building up production capacity and that promote access to financing for small and medium-sized companies.

The labour market and the role of Human Capital

If we look at the human capital base of a country we have to underline that the cost of labour is not the only and in a long-term view not even the most important determinant of competitiveness. Sustainable competitive advantage is based on advanced skills, worker attitude, entrepreneurship and motivation, and the use of labour (e.g. how many work really in the formal labour market). We have also to analyse the impacts of other determinants such as technology, education, a sectoral shift etc. on employment. Benefits of increased competitiveness are often not fully realised and shared but limited to sectors where the main focus lies on and (skilled) workers employed in these sectors.

Important questions with regard to competitiveness are:

- **Labour cost**: low wages can definitely be a competitive advantage, however, it tends to be a short-term advantage. We have to compare also the skill level (unskilled labour or skilled labour) and the level of labour productivity. Wages are often used as proxy for labour productivity - Do you think that wages serve as indicator for productivity/skill?

- **Characteristics of the labour market**, e.g.
  - What share of persons works in what sector? If there are major changes, e.g. from agriculture to services - what are the main reasons behind? What are the consequences - on exports, productivity, growth, but also employment, education, distribution of wealth? Is an expansion in the services and industrial sectors due to domestic entrepreneurship or linked to external forces such as improved economic conditions in other countries that result in a job creation in the export-oriented, MNCs-dominated industries.
  - Role of the informal sector
  - Regulations concerning e.g. hiring and firing (is there flexibility for both employers and employees to adapt to changing market conditions, how strong is workers' protection), minimum wages etc.
  - How many people are unemployed/underemployed? What is the share of women, elderly and young people in the labour market, what kind of activities are they mainly involved in?
  - How is the quality of work? Decent work means access to productive and remunerative jobs; a safe working environment; social protection and workers' rights; and social dialogue. How do you see the level of work discipline and motivation?

- Are there processes for dialogue between employers and employees' organizations?

- What is the role of labour unions? Are strikes very frequent?
Human Capital and skills (Metalevel) - Education and Training (Mesolevel)

- **What group** out of the workforce has **what kind of skills**?
- What skills and what knowledge have to be further developed?
- How is the **quality of education and training**? How have teachers and professors been trained and how is there knowledge being updated?
- Increased competitiveness requires not only more skills, but also **higher levels of skills** and **different kinds of skills**. How are these skills created (are skills acquired through formal education or informal one - learning-by-doing, on-the-job-training)?
- Are knowledge and skills and if yes, how are they linked to **changes in the industrial structure**?
- Is knowledge explicit and shared and can be used by decision makers at the policy and the private, the nongovernmental level?

The nature of a country's human capital basis is directly linked to another important determinant of competitiveness - **innovation and technology**.

- Technical improvements are related to **skill level** - is there the labour force sufficiently educated to adopt and implement new technologies?
- Innovation needs creativity and skills - a higher base of human capital facilitates innovation in terms of new/improved products, services, processes, and organisation).

Other factors that influence Innovation and Technology:

- What is the **role of research institutions**? What is the role of formal R&D (to absorb new technologies, to keep up with technological trends?) and what is the role of informal technological effort that occurs during the production process, such as process optimisation, quality management, raw material adaptation etc.? What is the role of universities? Are there joint research projects between universities and companies? What is the share of students enrolled in science or mathematics?
- How would you describe the capacity of domestic companies to absorb technologies and to apply theoretic findings?
- **Public and private R&D expenditures** in comparison with competitors? Is there any mechanism to enable SMEs to access technology?
- Are there mesolevel-institutions (technology support institutions) such as a standards bureau, SME support institutions, ... and what is there impact?
- How can **technology be diffused**? How is **foreign investment** targeted and what conditions are set in order to enable transfer of technology (especially through TNCs)
- What is the role of **industry clusters** in introducing, sharing, promoting and diffusing new technologies? Clustering is seen as a key strategy for competitiveness since it can reduce risks and costs through horizontal, backward or forward linkages (along the value chain). Networking in clusters can moreover facilitate knowledge spillovers and promote flexibility and adaptability. Transfer of technology can be eased by economies of scale and scope. However: what are the
conditions for a successful cluster? And - how are clusters linked to the rest of the economy/society?

**Trade patterns and trade policies**

Start the analysis by:

- Looking at **export values, growth rates and structure**. Structure means: what products, high-skill/low-skill products, resource intensive (e.g. oil refining), labour intensive (e.g. garments, toys), scale intensive (e.g. automobiles), differentiated, i.e. the production is tailored to varied demands (e.g. advanced machines), science based, i.e. production requires the rapid application of science and technology (e.g. biotechnology, electronics, medicines). Countries can upgrade their competitiveness also in labour-intensive products, e.g. by investing in quality and marketing. This can be better than letting whole industries fade away. However, exports that exploit relatively static sources of competitive advantage, such as unskilled labour and natural resources can lead to insufficient dynamism, lack of technological upgrading and a gradual loss of competitive advantage e.g. due to rising wages and emerging competition.

*Link this analysis of past and current trade structure to the following questions about policies:*

- What kind of **trade regime** was followed? Import substitution? Incentives for exports? Export promotion (e.g. export targets, targeted credits, public-private dialogue to review export strategy, "light" regulations in order to avoid procedural delays, export marketing, targeted attraction of TNCs whose activities lay in the future competitive advantage of the country)?

- When did **trade liberalisation** start, what steps did it follow? Was import liberalisation general or selective? What is the current situation? (e.g. elimination of tariffs, non-tariff barriers, local content programmes?)

- What **industries were protected**, for what reasons? (Targeted and temporary infant industry protection?) For what reasons are certain industries subsidized?

- Are there **supply-side measures** (e.g. training, information, technical support) that facilitate restructuring and upgrading, improve local supply and enable export competitiveness?

- Are **regulations and procedures** affecting imports, exports, foreign exchange allocations, foreign investment approvals and public services efficient?

- What **activities** are likely to thrive future competitiveness? Who is in charge of identifying and prioritising such areas of attention - the market, the government? Shift from one key activity to another can lead to important transition costs - were there/are there appropriate adjustment measures that help to maximise the benefits from structural reform while minimising transition costs?

**Foreign Direct Investment and Competitiveness**

FDI can play an important role in the structural transformation of an economy. It can act as an engine of export growth, domestic capital transformation, technology transfer and employment creation.

- Similar to trends in trade, you can start the analysis by looking at trends in **FDI** in comparison to competitors or countries that serve as a benchmark (e.g. inflows, growth figures, share of foreign affiliate employment with regard to total employment, in what industries (dynamic or static, low-skill or high skill?), who were the main investors).
Examine the **determinants of FDI** - what are the steps in the decision making process for foreign investors? Why do they decide to invest at all, on what basis do they select one country and what makes them choose the specific site?

**How is FDI linked to the domestic economy**, is there employment creation and if yes, at what level of skills?

Are there **incentives** to attract foreign Investment? What do they promote: specific activities such as export production or capital investment, specific industries such as advanced technology industries, or are there incentives e.g. for location in less developed areas, for R&D, manpower development, development linkages with local suppliers? What form do the incentives take, e.g. tax holidays/deductions, repatriation of capital, import duty exemption? Is there an effective monitoring of the effectiveness of incentives and a phasing-out strategy?

Is there a legislation that ensures **protection** of investment, e.g. against expropriation and nationalization, with regard to Intellectual Property rights?

**Fiscal policy and Public finance**

How is fiscal policy related to the sectoral structure of the economy, labour market characteristics, to FDI and export strategies?

- What are the sources of public finance? What is the tax base?
- Analyse the tax system - does it the tax system promote innovative investment and entrepreneurship? How high are corporate taxes compared to other countries, how high the VAT, how high employee income taxes? Is the corporate tax system skewed in favour of capital intensive production of exportable products and away from the labour-intensive domestic sectors?
- How does redistribution and the maintenance of a social security system work?
- In what sectors/public goods etc. do public expenditures go? Is there a strong focus on few industries or does fiscal policy aim to create/maintain diversity and depth by stimulating the efficiency of both FDI and internal investment?
- Does the tax system enhance a managed attraction of FDI? (tax benefits for foreign investors - is there a positive impact on FDI? What are the tax benefits for domestic investors?)
- Are there any crowding-out effects of the private sector due to public investment and/or sources of public finance?
- How high is public debt, public debt growth rates? Is debt due to high fiscal expenditures, due to liberalisation and privatisation processes changes in the tax base or to lowered tax rates that could stimulate consumption and investment?
- Is the tax and custom administration efficient?
- What consequences does a high level of public debt have on the private sector?
- Is fiscal evasion an important issue?

**Environment**

- Firms interact on four ways with the natural environment - by consuming resources (inputs), by consuming energy (indirect also inputs), by managing waste (collecting, storing, transporting etc. output without market value), and polluting (not managing output). Good environmental
performance (preventing pollution and waste) can contribute to achieving a higher level of operational efficiency and increase competitiveness. Environmental competitiveness can enhance overall supply side competitiveness by production efficiencies that increase marketable output per unit of input. Extending environmental responsibility to the entire value chain can considerably improve the image of a firm.

- Thinking about policies on environment means analysing the impact of environmental requirements (in this case at national level) on competitiveness. Do you think that environmental requirements represent only costs for companies (therefore decrease their competitiveness)? To implement strict environmental regulations leads in the first place to increased costs and puts companies at a competitive disadvantage vis-à-vis foreign competitors. Companies might even consider relocation (with the consequences of reduced sales, lost jobs, less investment) to countries or industries with a laxer environmental jurisdiction. In the worst case, this could lead to a “race-to-the-bottom”, where all countries adopt sub-optimal environmental policies. However, there are also theories that state that environmental protection can even have a positive impact on firm and industry competitiveness since a certain degree of regulation can stimulate innovation (e.g. reducing pollution comes often together with increasing the productivity with which resources are used). If these gains are bigger than the losses due to temporarily higher costs, competitiveness (through higher production efficiency, quality, and an improved image) will be enhanced with regard to countries with lax regulations.

- The intersection of trade liberalization and environment can create competitiveness concerns. We have to distinguish here fore two types of regulations: product standards and production process and method standards. The latter can lead to higher compliance costs and therefore reduced international competitiveness, if increased innovation cannot offset these costs. Product standards however may create barriers to trade but will not necessarily affect negatively the competitive position of domestic producers. Very strict or unusual requirements can even enhance the competitive position of the domestic producer by making it more difficult for foreign competitors to enter the market. Especially developing countries face more and more problems when exporting to developed countries since these impose often regulations in sectors where developing countries have become competitive, such as fishery, leather and textiles. Moreover, we find often SMEs operating in these sectors, and SMEs have in general more difficulties to respond to stringent requirements.

**Infrastructure**

Quality of infrastructure can be one key constraint to competitiveness of local firms and can discourage foreign companies from investing.

- How is the quality and coverage of transport system - roads, air traffic, trains, shipping lines, and ports? Supply with and access to electricity, water, and telecommunications? Are these sectors liberalized? How high are utility charges (electricity, water and telecommunications and air and sea freight rates?)

- What part of the public budget is earmarked to infrastructure projects?

- How is the national/regional infrastructure financed?
3. The Microlevel Determinants

Meta-, Macro-, Mesolevel enable, hinder or even impede competitiveness, however, competitiveness is always created at the microlevel. Here, you have to look both at industries and companies, at the past and current patterns and future potentials. What kind of enterprise is the most common in what sector (SMEs, firms, TNCs etc.) and what consequences does this have for the sector? Are there sectors that are characterized by monopolistic or oligopolistic structures? How do you explain these structures (entry barriers, subsidies, infant industries, industries that require protection in order to achieve economies of scale etc.)?

Can you observe regional concentration of industries and clusters that integrate the whole value chain of an industry? What consequences does this have - on the industry, the region, other regions in the country?

You can analyse the industry structure, including e.g. data for industry productivity, following Porters Five Forces (Module 2) and look at the different activities that constitute a company's value chain. The analysis of generic strategies can provide you with a quick overview of the possible competitiveness decisions a company can take (e.g. cost leadership versus differentiation). As we have seen, there are many qualitative features of competitiveness at the microlevel that are difficult to measure if you do not have access to survey results.

Since the microeconomic determinants of competitiveness are in their majority covered in the second module, we will see at this point only some additional questions that support a more detailed analysis of corporate competences. These are often strongly influenced by culture - both the "national" or "regional" culture and the specific company culture that is built up over time.

Corporate competence and strategies

- Managerial competence and leadership: do managers in local companies have the ability to attract, motivate and retain good human resources? Are there e.g. links to the educational sector? Are there processes to share and increase knowledge and skills within the company or even involving suppliers/customers? (Knowledge management). You can also look at different skills of managers, such as decision-making, communication and delegation.

- Competitiveness at the microlevel depends increasingly on the way firms combine technology, managerial competence, employee skills, business organisation and software to service markets and interact with customers and suppliers. Is there an emphasis on investment in intangible assets such as R&D, technology, skills (managerial, entrepreneurial, employee skills), business organisation, and market development? These are often competitive assets that provide capabilities and flexibility to adapt to change, survive and prosper.

- What control structure is the most common in domestic firms? Is there e.g. a functioning board of directors? Who are the owners (family-owned, sole proprietorship, Limited Partnership and Partnership with limited liability, corporations?) What are the advantages, what are the disadvantages of different forms of business ownership? Different ownership structure allow for example for different ways of access to finance. What is the priority: e.g. to pay shareholders or to invest into the company? If there is investment, is it mainly to sustain the business or does it also aim to expand and improve the activities? Are other stakeholders than the owners taken into consideration, such as suppliers, customers, labour unions, banks?

- Do companies produce according to the needs of the market? (Market orientation). Are customers involved at any stage in the production process?

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• How can best practices concerning cost structure and quality be achieved throughout the whole product cycle: research and development, sourcing, production, marketing, finance/controlling? Are there efforts to increase productivity and productive capacity?

Murphy's Law of Competitiveness ;)

• Competitive economies export products; uncompetitive economies export people.
• If you want more exports, make it easier to import-most of what you send out requires something of what you send in.
• If you want to boost exports, do not create an Export Promotion Agency.
• Crony capitalism is not the only solution to the government planning failures of "democratic socialist republics" free enterprise is also an option.
• Asset-stripping privatisation has not yet been declared a crime against humanity and will have to be dealt with for the time being as a purely national issue.
• Get the private sector to build your roads, ports and power plants-it's cheaper, safer, lasts longer and friendlier to the environment. And if anything does go wrong, there's someone you can sue.
• Negotiate free trade agreements. Not only do they boost your exports, they'll also let you blame the foreigners for having to implement those nasty reforms. Also, the opposition parties will have a heck of time reversing your initiatives once they are enshrined in internationally treaty documents.
• Half of new incremental foreign investment comes from existing customers; so before going off to a trade show in Frankfurt, talk to the investors already here and fix their problems-their word-of-mouth will do more for your than your costly advertisements in the Financial Times.
• When it comes to foreign investment promotion, forget what economist Paul Krugman says and pick winners and losers. If you need help, hire the Irish.
• Taxing business to pay for the chamber of commerce is like taxing people to support the church - everyone pays and nobody goes. An effective chamber of commerce has a governance structure that leads to its members, not to the Ministry.
• Competitive economies need more than a "level playing field"-they also need rules of the game that don't change, a trained team, decent equipment, and a good strategy!
• The point is not to promote more dialogue, but to promote effective dialogue.
• It's not just government that needs reform. To paraphrase Gabriel Garcia Marquez, many industry clusters in emerging economies are coming out of their own 100 years of solitude.
• Competitiveness is really only understood at the level of firms and industry clusters, but the prosperity of a country also depends on having the right platform for it.
• The number one obstacle to competitiveness is the mindset of the people.
Activities Module 4

The activities you find below can serve as examples of how to approach this module that covers a very wide range of topics. Depending on the topic, you can use for example case studies, videos and class discussions, essays or students’ presentations.

Additional information: Social capital

In order to understand better the concepts of investments in empowerment, social capital, and community driven development these concepts (all three are conceptually related and focus in part on inclusion, participation, organizations, and institutions), the World bank commissioned five consultants to write “think pieces” that examined the meanings of these topics and their interrelationships.

The video shows the five consultants presenting their findings at a roundtable discussion (the quality is therefore not very good). Presentations include definitions of social capital, community driven development, and empowerment and operational and conceptual links.

You can download the video from the World Bank website: http://info.worldbank.org/etools/bspan/PresentationView.asp?PID=9366&EID=482

The technical requirement would be to have installed at least RealPlayer 8.0, higher versions also work.

The video could be used by students who are interested in getting more information about social capital and related concepts.

Activity 1: Case study on public-private dialogue/partnerships


SENEGAL

Historically, there were various levels of public-private sector consultations in Senegal. Interest in the process grew in the 1990s among the political leadership as well as within the private sector. Although the national government became committed to consultation and established several mechanisms to carry it out, there were some major problems and constraints. In particular, since there was no national consensus on development issues, they were being reviewed on an ad hoc basis, without a long-term perspective, and strategies were not carried out. Commitments were made by the public and private sectors, but they were not met and invariably lost credibility. It became clear that existing mechanisms were inadequate to foster the public and private dialogue necessary to meet the challenges of globalization and industrialization.

Recognizing this need, the President of the Republic of Senegal established the Conseil Superieur de l’Industrie (Senegalese Industrial Partnership Council) in 1998 as a national mechanism for consultation between the Government and the key players in the industrial sector. The primary responsibility of the Council was to define the country’s industrial vision from 2010 to 2020, including an industrial policy. The private sector thus became fully involved in the policy development process. The Council is also charged with the responsibility of reviewing the legal and regulatory frameworks that influence the economy, as well as, monitoring policy implementation. Since its inception, the Industrial Partnership Council has carried out a number of reviews and has coordinated dialogue along those lines.

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The Council is chaired by the President of Senegal. Day-to-day activities are undertaken by a Management Committee, with other committees, such as the Arbitration Council, the Strategy Committee, the Clusters Committee, and the Committee on Infrastructure, in supporting roles. Within this framework, various activities have been undertaken at the national level, including strengthening national strategic information monitoring network; promoting quality, standardization, and metrology; and developing micro, small, and medium-scale enterprises. Hallmarks of the approach of the Council have been inclusion of all relevant actors, similar overall approaches for all sectors, ongoing consultation between the public and private sectors, a well-organized private sector with the capacity to participate, and a shared understanding of the need to improve competitiveness across the economy. To date, the Council is credited with promoting joint public-private work on policy and fostering more coherent and effective policies.

The Council’s Cluster Committee has identified eight clusters critical to the Senegal economy and has created a series of committees focused on the needs of particular clusters. The result has been a substantial shift in the focus of policies and public-private interaction to the meso or cluster level. The cluster committees involve people from a primary industry in the cluster as well as representatives from its suppliers, buyers, and those in related industries. Problems and constraints are identified for the cluster as a whole and strategies developed to meet with the problems and constraints in the short term, medium term, and long term. The process is one that tries to understand the relevant markets, evaluates future trends, tries to develop a long-term vision for the cluster, and promotes collaborative activities on concrete initiatives in line with the vision.

The budget for the IPC is provided for by the national government, the private sector, development finance institutions, and some donors. Those familiar with the process indicate that establishing the IPC was not easy. The private sector had to be continuously sensitized and had to be assured that it would be treated as an equal partner. It became clear that the problems that needed to be addressed were best identified by the private sector and that the private sector needed some support from the government in order to develop the capabilities to participate fully. Although there was mistrust and some conflicting interests at the initial stage, by 1999 the relevant stakeholders had recognized the need for and the benefits of the Partnership Council.

Questions:
- What triggered the decision to establish mechanisms for public-private consultations?
- How did the government respond to the need for more public-private dialogue?
- What problems could emerge in the initial stage of establishing public-private dialogue mechanisms? What recommendations would you give to avoid or minimize such problems?
- What recommendations would you give to ensure that the mechanism is successful in a long-term perspective?
- Could you think about a different (better) public-private dialogue mechanism?
- Are there similar initiatives in your country? How would you assess their impact?

Activity 2: Government interventions and targeted industrial policies
The following case study is from Lall, S. (2004): "Reinventing Industrial Strategy: The Role of Government Policy in Building Industrial Competitiveness", UNCTAD

Industrial Targeting in Taiwan Province of China
In Taiwan Province of China early trade policies had extensive quantitative restrictions and high tariff rates that shielded domestic consumer goods from foreign competition. To take advantage of
abundant labour, the government subsidised light industries, particularly textiles. As import substitution started to run out of steam, by 1960 a multiple exchange rate system was replaced with a unitary rate, and appreciation was avoided.

Tariffs and import controls were gradually reduced, especially for inputs to export. In addition, the Bank of Taiwan offered low-interest loans to exporters. The government also hired the Stanford Research Institute to identify promising industries for export promotion and development. On the basis of Taiwan’s comparative advantage in low-cost labour and existing technical capabilities, the institute chose plastics, synthetic fibres and electronic components. Other industries subsequently promoted included apparel, consumer electronics, home appliances, watches and clocks.

In the 1970s, Taiwan Province of China again drew upon foreign advice, now from consultants Arthur D. Little, to upgrade the industrial structure and enter into secondary import substitution. These interventions included the setting up of capital-intensive, heavy and petrochemical industries to increase production of raw materials and intermediates for the use of export industries. In the 1980s, as its light exports lost competitiveness, Taiwan Province of China again moved to restructure the economy. After extensive consultation with domestic and foreign advisors, the government decided to focus on high-technology industries: information, biotechnology, electro-optics, machinery and precision instruments, and environmental technology industries. The shift to a high-technology economy necessitated the close co-ordination of industrial, financial, science and technology, and human resource policies. Individual tariff rates still varied widely, with widespread quantitative restrictions in use: the use of these protective instruments was made conditional on prices moving towards international levels in 2.5 years.

The average legal tariff rate in 1984 was as high as 31 per cent, higher if additional charges are added; this is higher than the 34 per cent prevalent in the developing world.

Mathews (2001) describes one of the most successful and distinctive recent tools of industrial policy used in Taiwan Province of China, R&D consortia. “Unlike the case of many of the collaborative arrangements between established firms in the US, Europe or Japan, where mutual risk reduction is frequently the driving influence, in the case of Taiwan it is technological learning, upgrading and catch-up industry creation that is the object of the collaborative exercises. Taiwan’s R&D consortia were formed hesitantly in the 1980s, but flourished in the 1990s as institutional forms were found which encourage firms to cooperate in raising their technological levels to the point where they can compete successfully in advanced technology industries. Many of these alliances or consortia are in the information technology sectors, covering personal computers, work stations, multiprocessors and multimedia, as well as a range of consumer products and telecommunications and data switching systems and products. But they have also emerged in other sectors such as automotive engines, motorcycles, electric vehicles, and now in the services and financial sector as well. Several such alliances could be counted in Taiwan in the late-1990s, bringing together firms, and public sector research institutes, with the added organizational input of trade associations, and catalytic financial assistance from government. The alliances form an essential component of Taiwan’s system of innovation.

Taiwan’s high technology industrial success rests on a capacity to leverage resources and pursue a strategy of rapid catch-up. Its firms tap into advanced markets through various forms of contract manufacturing, and are able to leverage new levels of technological capability from these arrangements. This is an advanced form of “technological learning”, in which the most significant players have not been giant firms (as in Japan or Korea), but small and medium-sized enterprises whose entrepreneurial flexibility and adaptability have been the key to their success. Underpinning this success are the efforts of public sector research and development institutes, such as Taiwan’s
Industrial Technology Research Institute (ITRI). Since its founding in 1973 ITRI and its laboratories have acted as a prime vehicle for the leveraging of advanced technologies from abroad, and for their rapid diffusion or dissemination to Taiwan's firms ... This cooperation between public and private sectors, to overcome the scale disadvantages of Taiwan's small firms, is a characteristic feature of the country's technological upgrading strategies, and the creation of new high technology sectors such as semiconductors.

It is Taiwan's distinctive R&D consortia that demonstrate most clearly the power of this public-private cooperation, in one successful industry intervention after another. Taiwan's current dominance of mobile (laptop) PCs for example, rests at least in part on a public-private sector led consortium that rushed a product to world markets in 1991. Taiwan's strong performance in communications products such as data switches, which are used in PC networks, similarly rests on a consortium which worked with Taiwan's public sector industry research organization, ITRI, to produce a switch to match the Ethernet standard, in 1992/93. When IBM introduced a new PC based on its PowerPC microprocessor, in June 1995, Taiwan firms exhibited a range of computing products based on the same processor just one day later. Again this achievement rested on a carefully nurtured R&D consortium involving both IBM and Motorola, joint developers of the PowerPC microprocessor, as external parties. Taiwan is emerging as a player in the automotive industry, particularly in the expanding China market, driven by its development of a 1.2 litre 4-valve engine. Again, this is the product of a public-private collaborative research endeavour involving three companies, which have now jointly created the Taiwan Engine Company to produce the product. Thus, the R&D consortium is an inter-firm organizational form that Taiwan has adapted to its own purposes as a vehicle for catch-up industry creation and technological upgrading. The micro-dynamics of the operation of these alliances or consortia, is therefore a matter of some substantial interest".

Questions:
- Describe how the government of Taiwan did actively intervene in order to foster competitiveness of domestic industries?
- What were the events and developments that triggered changes and adjustments in the industrial policies? When were policies proactive and when reactive to external changes?
- Compare the experience in Taiwan with past and present policies and efforts in your own country. Do you consider the government interventions in Taiwan as excessive? What were the positive consequences? Can you think about any negative effects?
- What role did the private sector play in defining key sectors and implementing and promoting industrial competitiveness strategies?
- In the following table you find Taiwan compared to the Industrial Policy objectives of other NIEs (Hong Kong, Singapore, Korea): comment on the different strategies.

### Industrial Policy Objectives of NIEs

<table>
<thead>
<tr>
<th></th>
<th>Deepening industrial structure</th>
<th>Raising local content</th>
<th>FDI strategy</th>
<th>Raising technological effort</th>
<th>Promotion of large local enterprises</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hong Kong (China)</strong></td>
<td>None</td>
<td>None</td>
<td>Passive open Door</td>
<td>None accept technology support for SMEs</td>
<td>None</td>
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Singapore

<table>
<thead>
<tr>
<th>Policies</th>
<th></th>
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<tbody>
<tr>
<td><strong>Very strong push into specialized high skill/tech industry, without protection</strong></td>
<td>None, but subcontracting promotion now started for SMEs</td>
</tr>
<tr>
<td><strong>Aggressive targeting and screening of TNCs, direction into high value-added activities</strong></td>
<td>None for local firms, but TNCs targeted to increase R&amp;D</td>
</tr>
<tr>
<td><strong>None, but some public sector enterprises enter targeted areas</strong></td>
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</tbody>
</table>

Taiwan Province of China

<table>
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<tr>
<th>Policies</th>
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<tbody>
<tr>
<td><strong>Strong push into capital, skill and technology intensive industry</strong></td>
<td>Strong pressures for raising local content and subcontracting</td>
</tr>
<tr>
<td><strong>Screening FDI, entry discouraged where local firms strong. Local technology diffusion pushed.</strong></td>
<td>Strong technology support for local R&amp;D and upgrading by SMEs. Government orchestrated high tech development.</td>
</tr>
<tr>
<td><strong>Sporadic: to enter heavy industry, mainly by public sector</strong></td>
<td></td>
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Republic of Korea

<table>
<thead>
<tr>
<th>Policies</th>
<th></th>
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<tbody>
<tr>
<td><strong>Strong push into capital, skill and technology intensive industry, especially heavy intermediates and capital goods</strong></td>
<td>Stringent local content rules, creating support industries, protection of local suppliers, subcontracting promotion</td>
</tr>
<tr>
<td><strong>FDI kept out unless necessary for technology access or exports, joint ventures and licensing encouraged</strong></td>
<td>Ambitious local R&amp;D in advanced industry, heavy investment in technology infrastructure. Targeting of strategic technologies</td>
</tr>
<tr>
<td><strong>Sustained drive to create giant private conglomerates to internalize markets, lead heavy industry, create export brands.</strong></td>
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**Activity 3: Impact of innovative investment and exchange rates on cost competitiveness and export performance**


Lecturers can use this case study to visualize how changes in the nominal exchange rate can influence or even offset competitiveness gains through innovation and advantages in labour costs (at least in a short term perspective).

Consider a two-country world comprising a developing country, with a low average level of both labour costs and labour productivity, and a developed country, with a high average level of labour costs and labour productivity. Expressed in a common currency, these levels are assumed as 5 and 10 in the developing country and 50 and 100 in the developed country (case 1 in the table below). Furthermore, assuming that in both countries the average level of labour costs reflects the average level of labour productivity, firms in both countries face the same average level of unit labour costs (i.e. 0.5 currency units). If labour is the only internationally immobile production factor, these assumptions imply that firms from both countries are, on average, internationally competitive. Moreover, if firms set sales prices on the basis of a mark-up of 100 per cent over labour costs, the absolute level of profits in the developed country will be 10 times higher than in the developing country.
Innovative investment, exchange rate changes, and international competitiveness: a numerical example

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
<th>Case 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No innovative investment</td>
<td>Innovative firm average</td>
</tr>
<tr>
<td></td>
<td>Developing country</td>
<td>Developed country</td>
</tr>
<tr>
<td>Productivity</td>
<td>10</td>
<td>100</td>
</tr>
<tr>
<td>Nominal labor costs</td>
<td>0.5</td>
<td>0.5</td>
</tr>
<tr>
<td>Unit labor costs</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Profits per unit of output</td>
<td>5</td>
<td>50</td>
</tr>
<tr>
<td>Price</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

1. Unchanged nominal exchange rate
2. Nominal exchange rate appreciation by more than 20 per cent
3. Nominal exchange rate depreciation by more than 20 per cent


The effects of innovative investment

Case 2 in the table introduces the effects of innovative investment by assuming that productivity increases by 20 per cent in innovative firms of both countries. If the weight of these firms in their domestic economies is too small for these productivity gains to have a marked impact on the economy-wide average level of productivity, nominal labour costs will remain unchanged, and unit labour costs in the innovative firms will decline by 20 per cent. Profits per unit of output will also remain unchanged if the innovative firms reduce their sales prices in line with the decline of their unit labour costs. This implies that the innovative firms from both countries will experience an increase in both their export-market shares and their absolute level of profits. By contrast, non-innovative firms will suffer a decline in export-market shares and in profit levels due to the increase in their sales prices relative to those of the innovative firms.

How can affiliates of TNCs benefit?

Case 3 in the table shows that affiliates of TNCs can gain considerable advantages in international competitiveness by combining developed-country technology with developing-country labour costs. The levels of the affiliate's unit labour costs will be substantially lower than either its parent company in the developed country or of domestic firms in the developing country. While it is unlikely that the relatively less educated workers in the developing country can match the productivity level of workers in the developed country, it is probable that the TNC will experience a strong reduction of its unit labour costs by moving its labour-intensive production activities to a low-wage country.

What impact do changes in the exchange rate have?

Changes in the nominal exchange rate that are caused by "autonomous" capital flows (i.e. that are unrelated to the flow of goods) can offset the effects discussed above. In case 1, export-market
shares will move from firms of the country whose currency appreciates towards firms of the country whose currency depreciates, even though none of the firms has undertaken productivity-enhancing investments and unit labour costs, measured in domestic currency units, have not changed in any of the firms. More importantly, the innovative firms in case 2 will lose, rather than gain, export-market shares if the appreciation of the exchange rate exceeds productivity gains. For example, assuming the currency of the developing country to appreciate by more than the productivity gains achieved by innovative firms, these firms will lose export-market shares to both the innovative and non-innovative firms of developed countries. This example shows that adverse external monetary shocks can wipe out the gains resulting from an improvement in the international competitiveness of developing-country exporters based on innovative investments and a decline in unit labour costs.

**Activity 4: Case study on Exchange Rate Policy and Price Determination in Botswana**

This case study is taken from: Jacob K., Atta; Keith R., Jefferis; Ita, Mannathoko and Pelani, Siwawa-Ndai (2000), African Economic Research Consortium

Since the discovery of its diamond wealth in the mid 1970s Botswana has used exchange rate policy, coupled with prudent macroeconomic and public finance management, to avoid many of the problems experienced by other developing country mineral exporters. Diamond revenues have enabled Botswana to enjoy a high level of social services such as health, education, water supply, etc. The extreme dependence on diamonds, however, has made the country highly vulnerable to external shocks caused by changes in the diamond market. In the face of this threat, the government has recognized the urgent need to diversify the economy and find new sources of economic growth, employment and exports. In the context of promoting non-traditional exports - beyond diamonds and beef - policy measures to protect Botswana’s export price competitiveness become critical. To this end Botswana has long relied on a nominal exchange rate.

**What is the problem?**

In practice, there may be a conflict between the two key exchange rate policy objectives of maintaining stable prices, which requires exchange rate stability, and maintaining export price competitiveness, which requires devaluation. Typically, efforts to stimulate the competitiveness of non-traditional exports involve devaluation of the nominal exchange rate in order to alter the real exchange rate and improve the incentive structure facing producers. On the other hand, devaluation will also increase the price of imports and push up domestic inflation. This dichotomy calls to question Botswana's objective of ensuring competitiveness by refusing to devalue the currency. The purpose of this study was to provide policy makers in Botswana with information on the possible effects of exchange rate policies, particularly the extent to which nominal exchange rate depreciation and foreign price changes pass through to domestic prices. The study uses an econometric model to establish the link between long-run equilibrium prices and short-run inflation. The idea is to ascertain the extent to which the nominal exchange rate can be used as a tool to influence the real exchange rate.

**Botswana's monetary and exchange rate policies**

For most of the period since 1976, when Botswana left the Rand Monetary Area and introduced its own currency (the pula), the country has used a managed float pegged to a basket of currencies, by either changing the exchange rate or changing the composition of the basket. Mostly, the pula has been allowed to appreciate against the rand in order to counter the effects of rising inflation in South
Africa, Botswana's major trading partner, and protect its own investment climate. There have been a few small devaluations; however - in 1982, 1990 and 1991 - to raise the competitiveness of Botswana exports.

Botswana faces a dilemma in its exchange rate policy because the currencies of its primary trading partners move against each other. When the rand depreciates against the US dollar, Botswana becomes more competitive against the rest of the world; there is a windfall gain on exports and foreign exchange reserves, and Botswana does not have to initiate a policy response. If the rand appreciates against the dollar, the opposite occurs. In this case, the policy response of depreciating the pula against the dollar to maintain competitiveness would cause higher inflation via imports from South Africa.

Through these deliberate policy moves to keep internal inflation below that of South Africa, Botswana's inflation rate, though varying considerably over the years has never been the problem that some developing countries have known. Although not all inflation is imported, in practice domestic prices tend to move fairly closely in line with import prices.

Monetary policy has changed somewhat over the years, but the interest rate has been used as a monetary policy most of the time. For much of the 1980s the emphasis was on keeping interest rates low in order to reduce excess liquidity by stimulating the demand for loanable funds. This policy was only partially successful, and had the adverse result of negative real interest and the accompanying incentive distortions for both savers and borrowers. When international capital is mobile, change in the money supply may cause money market disequilibrium that will be offset by international capital flows in response to domestic and foreign interest rate differentials. In Botswana interest rate arbitrage is prevented by capital controls. Although there is insufficient private money demand to keep the money market in equilibrium, the Bank of Botswana effectively creates demand by sterilizing its mineral revenues. Botswana thus has some scope for independent monetary policy, a position that is reinforced by other mechanisms, including the government's control over its own spending and the choice of a managed float exchange rate.

**Results of the study**

The study finds that over the long-term South African prices and the nominal rand / pula exchange rate has a very strong influence on prices in Botswana. Some 92% of Botswana prices are determined by these two factors. The relationship seems to have changed over time, however, and was stronger from the mid 1970s to the mid 1980s than it has been in more recent years. In part this is due to the rapid expansion of Botswana's economy, which has made it less dependent on South Africa.

There is also a strong influence of these variables in the short run, as they explain some 60% of changes in Botswana prices. The impact is felt fairly quickly; after one year, 70% of price changes in South Africa have fed through to changes in Botswana. Changes in prices in Zimbabwe also feed through to Botswana prices, but the overall effect is rather small, only 14% after 13 months. The impact of US prices - used as a proxy for the rest of the world - is substantial and swift; 72% of US price changes feed through immediately. The speed of this impact is surprising, considering the indirect links between US prices and the Botswana economy.

Given the relatively high inflation in South Africa and lower but still positive inflation in the US, it follows that foreign prices only move in one direction – up. Exchange rates, however, tend to fluctuate in both directions, particularly against the rand. It is possible that if the rand / pula rate depreciates, importers fairly quickly increase their Botswana prices accordingly to maintain their profit margins. But in the case of an appreciation, they retain the increased margin due to the lack of competition. The
The overall effect of this asymmetrical response is therefore a relatively small impact of exchange rate changes on Botswana prices compared with the impact of foreign price changes.

**Implications for policy makers**

The analysis confirms the existence of a trade-off between inflation and export competitiveness objectives in real exchange rate targeting. In the short run, both domestic prices and imported inflationary pressures determine growth in the price level each month. This suggests that monetary, exchange rate and fiscal policy can be used to temper inflation in the short run. Changes in the exchange rate and prices will only have short-term effects on price competitiveness, however. Over time adjustment back to the equilibrium real exchange rate occurs.

An important distinction exists between long-run and short-run effects. In the long run South African prices and the rand/pula exchange rate dominate Botswana prices. Nominal exchange rate and foreign price changes almost completely feed back into domestic prices. There is limited scope for using the nominal exchange rate to influence the real exchange rate and export competitiveness. Any gains in competitiveness will eventually be offset by price changes.

The speed of adjustment in the short run towards long-run equilibrium allows some flexibility in exchange rate policy. Devaluation can be used as a tool to enhance competitiveness, and domestic monetary measures could be used to contain the short-run inflationary pressures that would result. But it takes a long time for domestic price changes to negate the gains in competitiveness that would result in devaluation. A devaluation policy would be at the expense of higher prices in the long run.

When targeting a particular real exchange rate to influence export price competitiveness, policy makers must take into account the fact that both South African and US inflation rates have a short-run inflationary impact in Botswana. Inflation in those countries must be factored into the calculation of the targeted real exchange rate. There is, as well, a need to respond to foreign price influences with domestic monetary policy measures in the short run. If macroeconomic policies could be used to keep inflation in Botswana below that of its trading partners, then export competitiveness could be improved without devaluation.

**Questions:**

- What role did exchange rate policy play in Botswana?
- Outline the two main exchange rate objectives. What kind of conflict emerges when trying to achieve both at the same time?
- Describe what problem Botswana faces, having the currencies of its main trading partner moving against each other.
- Analyse your own country: what countries are the main trading partners? How does your exchange rate move with regard to theirs? Do price changes in foreign trading partners markets translate into price changes in your own economy? Is that a long-term or short-term effect?
- Discuss: can devaluation represent a useful instrument to increase domestic export competitiveness?
Activity 5: Key determinants of competitiveness and linkages

As explained in the handbook text, we have not only to look at individual determinants of competitiveness but we have also to analyse the links, causal chains and feedback loops. It will be difficult to present all determinants in one system. It might therefore be better to choose one specific topic that leads the analysis and to determine accordingly the borders of the “competitiveness system” that you want to examine. The figure below can be an brief example of how to present these links.

Paraguay - Linkages of the meta-, macro-, meso- and microlevel: Obstacles to competitiveness

The figure below does not only shows metalevel determinants (obstacles to competitiveness) in Paraguay but also factors at the other three levels. Even more important is, that it also shows the linkages and reinforcing feedback loops among different factors at different levels. At this point, we will focus on metalevel factors.

Source: according to Altenburg, Hillebrand, Meyer-Stamer (1998): Building Systemic Competitiveness, p.32

We have to highlight at the meta-level the importance of the informal export sector, the so called "tourist trade". Even the liberalization of trade within the Mercosur region did not affect the sector as expected. Prices are still lower in Paraguay than in Brazil and organizers of shopping tours to Ciudad del Este, the main location of tourist trade, managed to increase the attractiveness of their offers by integrating visits to main sights.

As long as the situation remains like this, both policy makers and the private sector will not feel urged to stimulate industrial development and to develop a consensus on how to achieve this among all involved actors. The lack of sense of urgency has wide impacts on all levels. There is no immediate need to make support institutions at meso-level more efficient, companies at micro-level do not feel urged to improve quality and productivity what goes together with the constraint of limited competence at the micro-level. The lack of an industrial, technological and quality culture hampers additionally the formulation of a common strategy with regard to competitive industrial and export policies.

Choose one industry in your economy and analyse (few) main competitiveness determinants at different levels: what are constraints where do you see advantages and how are depend determinants on each other? Try to visualize your findings in a system like the one above (you can additionally include causal chains and feedback loops).

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Ideas for essay questions/topics for presentations to prepare by students:

1. **How can a competitiveness strategy lead to development?**

   Analysis of a "success story" and a "failure": what were the key factors for enhanced competitiveness? Can some of the experiences of the success stories be "exported" to other countries that might be at a different stage of development/be characterized by a different industry structure etc., i.e. might have a different "mix" of determinants of competitiveness?

2. **Competitiveness of regions:**

   Present a case examining competitiveness on a regional level, looking also at the impact of regional integration/cross-national areas on both regional competitiveness and national competitiveness.

3. **Analyse a case of competitive industrial restructuring** - positive and negative consequences as well as different actors’ responses at different levels. Could competitiveness gains be transferred to the sectors that were not among the winners of the restructuring process?

4. **Clusters**

   Examine and present one example of a competitiveness strategy that is based on cluster development (concentrations of interconnected companies, specialised suppliers, service providers, firms in related industries, and associated institutions, such as universities and trade associations). Possible questions: What are the particular features of the industry to serve as core of a cluster? What were key determinants (meta-, macro-, meso-, microlevel), what complementary prerequisites for the creation of the industry cluster? Were there active policies behind or did the cluster emerge “spontaneously”? What role did/does the government (at national level/at regional level) play? Could FDI be directed to upgrade the cluster? What kind of company forms part of the cluster – SMEs, TNCs, large domestic firms? How did the cluster evolve over time? How can competitiveness benefits based on a cluster strategy be linked to the rest of the economy/society?

**FINAL PROJECT**

The project (alternatively to the simulation) will give the students the opportunity to apply and test their knowledge. Possible subjects are briefly summarized below. The project has the objective to make students once again critically think about the concept of competitiveness. When choosing their own approach (can be one of the models analysed in Module 2 and using rankings and indicators presented in Module 3, but not necessarily) students should become aware of the limitations and they should integrate their critique when presenting their results to their fellow students.

**Project on country-specific competitiveness: example for content and structure**

- Assess current level of competitiveness using one of the measurement approaches (indexes, descriptive etc.)
- Define the country's competitiveness vision (short/medium/long term goals)
- Find major weaknesses/bottlenecks
- Define competitive strengths to be exploited
- Identify sectors with growth potential
- Define policy tools in an integrated strategy, give recommendations for the government, meso-level actors, companies taking into consideration the role of international institutions, agreements etc.
Students could also choose to their projects on specific enabling factors (determinants), e.g.:

- ICT/e-Business and competitiveness, Technology/new and dynamic sectors and competitiveness: Discuss and determine the impact of ICT/new and dynamic sectors or a mixture of those on competitiveness. How are other determinants such as the labour market, education or innovation related to ICT/technology as competitiveness determinant? Describe specific case studies.
- The labour market and competitiveness: possible issues to look at could be changes in the structure, flexibility, but also the role of the informal labour market etc.

...  

**Project on sector-specific competitiveness.** Porters approach could be a way to look at sector specific competitiveness.

**Analysis with focus on one of the four levels (meta-, macro-, meso-, micro).**

Students could analyse competitiveness of a country/a region by focusing primarily on one of the four levels. Outline also links to other levels.

**SME competitiveness.** A project could also focus on the role of SMEs as a key element of an economy, especially in a developing country. While competitiveness is spontaneously associated with an international perspective, it might be good necessary to look first at the domestic aspects of SME competitiveness. Examine if - and in this case - how policies aiming at competitiveness at an international level can be coherent with policies pursuing national development. Ideas for content and structure:

- Importance of SMEs for developing countries economies
- Opportunities and risks for SMEs
- Access to finance and business development services
- Access to technology
- Strengths and limits of business linkages through TNCs and FDI
- International/National policy coherence
Competitiveness Simulation

IT-related and enabled services (ITES)

(Part of Training Material on Competitiveness and Development)

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CONTENTS

1. Introduction and overview (purpose of the simulation, learning outcomes, actors and rules)

2. Structure (step by step guide to running the simulation for the lecturer/moderator)

3. Background: Competitiveness and IT in Sunhila

4. Information on Sunhila (general economic, political and social information for all participants)

5. The potential of IT: Sector specific information

6. Information about competitors

7. Individual instructions for actors

- Government of Sunhila
- US based Transnational Corporation (TNC)
- Licensed Information Technology Service Providers Association (LITSPA)
- IT and IT Services Labour Union
- Agriculture and Agricultural Processing Labour Union
- Representatives of the education and training sector
- Regional government
- Separatist leader
- Main opposition party

8. Interventions (external events to be introduced by the lecturer/moderator)

9. References
1. Introduction and overview

This simulation involves a fictional developing country that is considering increasing its investment in the IT-related and enabled services sector so as to increase the competitiveness (economic, social and political) of the country.

The decision on where and how to make new government investment to achieve a competitive development outcome is a complicated one. The country has suffered from internal conflict for over 20 years and is in a politically precarious situation.

This simulation involves ___ groups of actors plus the office of the President (the government). The government asks key stakeholders for their submissions regarding the proposed new investment in IT-related and enabled services including issues such as location of any new investment, potential of clusters and importance of educational and human resource development.

The objective of the simulation is for each group of actors to present their views and advice to the government so that they can make a decision.

By the end of the simulation the government will have heard presentations and submissions by all the groups of actors and will then make a decision.

Learning Outcomes:
The simulation will allow participants to
- Experience different views on competitiveness
- Use different political, social and economic interests to formulate a range of perspectives on what constitutes "competitiveness"
- Prepare presentations and statements providing accessible and persuasive information on what competitiveness means from the perspective of the relevant actors
- To outline what the requirements of competitiveness are at different levels and to suggest how to maintain and increase it.
- Practice their presentation, communication and negotiation skills in a collaborative group learning situation

It is expected that this simulation will take up 2-3 full days. It is advisable that time is provided in between the different parts of the simulation for actors to prepare their inputs.

Actors
- Government of Sunhila
- US based Transnational Corporation (TNC)
- Licensed Information Technology Service Providers Association (LITSPA)
- IT and IT Services Labour Union
- Agriculture and Agricultural Processing Labour Union
- Representatives of the education and training sector
- Regional government
- Separatist leader
- Main opposition party
**Outcome of the simulation:**
The government has to make a decision on which policies it will pursue to enhance competitiveness in the ITES sector. This decision will take into account the submissions of the other actors involved. It will be based on a consideration of development and social efficiency as both possible requirements and consequences of this strategy. *Therefore it cannot limit the competitiveness analysis to economic indicators.*

As far as possible, a compromise should be pursued in order to get the widest possible support. If the given actors do not agree on one common formulation of a competitiveness strategy, the government must still make a decision. Remember however that *shared policy formulation* is an important determinant of competitiveness at the Metalevel.

**Rules for the simulation:**
- Each actor or group of actors needs to follow the instructions and directions of the moderator (your teacher or lecturer).
- Defend your position but be constructive: the key issue is to increase competitiveness in the ITES sector and to enhance at the same time social efficiency. Link your arguments to this key issue. If you think that the two goals are contradictory, or you want to prioritise another issue, explain why and present your priorities and recommended policy options – that have to contribute to at least one of the two goals.
- Back-up your statements with given data or qualitative information. You might invent information (that is not given/could be given only to you), but be realistic since you want to convince the other actors i.e. it is unlikely that a solution will be found by people landing from Mars and discovering a new IT application.
- Use "competitiveness vocabulary" - think about important determinants and indicators.
- Consider the restrictions that you will be facing (economic - e.g. public budget, legal restrictions).
- Consider the perspectives and viewpoints of your competitor(s), try to anticipate their arguments.
- Try not only to point out what has to be done but also why and – importantly – how.
- You are free to choose the "version" of competitiveness you want - from very narrow to systemic. Since the approach to competitiveness implies its goals, your competitiveness might however be closely linked to your interests and concerns.
2. Structure of the simulation

The following outline provides instructions and the sequence of events involved in this simulation. Additionally to the meetings and discussions that are specified below, actors can meet bilaterally or form coalitions outside of the main events at any point in the simulation. It is expected that students will take notes throughout.

Session One (all students):
- Introduce to the students the content, objectives and procedures for the simulation (see above).
- Divide the students into groups corresponding with the actors involved. Think about which students might benefit most from taking particular perspectives and playing particular roles.
- Distribute the relevant material. NB some information is for ALL actors, other information is specific to the different groups and contains their particular instructions.

➤ TASK 1 - National Government

The government has to organise a meeting of representatives from the Regional Government, the TNC and the ITES Labour Union. They must prepare an invitation explaining why they are consulting with these particular groups and presenting what their desired outcome is. It should also ask these representatives to prepare a short presentation of their position, opinion, concerns and possible policy options. This invitation must be finished and circulated to the relevant groups by the end of the first session (1-2 hours)

While the government group are preparing this task, the other groups have time to read through all the background information and conduct any additional research or fact-finding relevant to their position.

➤ TASK 2 - Regional Government, the TNC and the ITES Labour Union

In response to the invitation from the government, the groups representing the Regional Government, the TNC and the ITES Labour Union must prepare their contributions. They have to do this BEFORE session two.

Session Two (government, regional government, ITES union and TNC)
- Welcome back students and introduce the next stage - the first meeting of the government with selected stakeholders.

➤ TASK 3 - National Government, Regional Government, the TNC and the ITES Labour Union

The government opens the meeting welcoming participants and reiterating their objectives in this exercise. They hear the relevant presentations:
- Regional Government
- TNC
- ITES Labour Union.

These are followed by debate and discussion.
The other groups may continue to prepare their own positions during this process. They will be invited to come back into the main room at the end of the meeting to be given a newspaper article, leaking the information about a proposed new strategy for government investment.

- **TASK 4** - the Agriculture and Agricultural Processing Labour Union, the Licensed Information Technology Service Providers Association (LITSPA), the main opposition party, representatives of the education and training sector and the separatist leader

The non-invited actors have been given a newspaper article about this proposed new government strategy which makes clear that they have been excluded from discussions.

Either alone or together they must write letter(s) to the government complaining that they have been excluded and outlining why it is essential that their perspective is considered in the consultation and negotiations.

These letters must be prepared BEFORE Session Three

**Session Three (all actors)**

The government welcomes all actors to the meeting and explains why they have widened consultations and participation.

The representatives from: the Licensed Information Technology Service Providers Association (LITSPA), education and training sector; the agriculture labour union and the separatist spokesperson each make a presentation of their position, opinions and concerns (based on letters to the government).

Other actors can intervene and ask for clarification.

The government reveal that there have been customer boycotts in the US about outsourcing services to Sunhila.

*They ask for comments and feedback from the different actors on how to respond.*

A break is called. When actors return, the government also decide to read out a statement from the US at a recent International Donor Session.

*They ask for comments and feedback from the different actors on how to respond to this statement.*

- **TASK 5** - all actors

Before the final session, all actors must prepare (individually or jointly) short final statements on what they think the government needs to do. These should be policy orientated but backed up with evidence and argument. These must be submitted, in writing to the government.

- **TASK 6 (AFTER session three) – Main Opposition Party and National Government**

The main opposition party asks the government for a private meeting to discuss different positions and conditions for a possible coalition. The opposition party should prepare a short write-up as basis for the meeting. The meeting has to take place BEFORE Session four.

- **TASK 7 - National Government**

The government have to make their decision. *As they are deliberating a senior government official is presented with an interesting offer (bribe - information just for lecturer/moderator)*
**Session four (all actors)**

The government presents its decision and its rationale, explaining the key steps it will take in the coming months to enhance competitiveness in the IT and IT enabled services sector and to increase social efficiency.

**It could include:**

- Brief summary of different positions.
- What are main competitiveness bottlenecks, what are strengths?
- Outline on what determinants the policy focus will lie, define requirements (e.g. education, infrastructure, clusters, business environment, access to technology and finance, fiscal or other incentives, subsidies, public-private dialogue mechanisms, legal issues, quality standards, information security, how can the government be an example...).
- Role of different actors in the competitiveness and social efficiency strategy, what support the government expects from actors, how their concerns will be taken into account.
- How do micro/meso/macro/metalevel interact?
- Economic/political/social priorities?
- Definition of measurable objectives.

This should be presented in the context of their general election campaign.

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After the simulation has finished it is important that there is a "wrap-up"/evaluation session where students can make explicit some of their learning through the activity. For example:

- What approach to/definition of competitiveness did they use? Systemic - linking the ITES sector to other determinants and policy goals, or a narrow economic view?
- How did their position change over the time?
- What were the difficulties in finding a compromise? Despite differing interests - what are the requirements to achieve the goal of increased competitiveness and social efficiency? Were these two goals compatible?
3. Background Information:

A competitiveness strategy for Sunhila?

So why competitiveness?

A high Sunhilese government official came recently back from a conference on the World Competitiveness Bible. He was very impressed by what he heard at this conference and was struck how "competitiveness" could be a way of driving forward his country's development.

He proposes to his government to make "competitiveness" a main policy goal since it could combine political/social promises and macro-/microeconomic goals. He was particularly excited by the promise of the IT and IT services (IT-related and enabled services) sectors as potential drivers for growth and development. At the conference he had heard examples from different international organisations and research institutions of how the concept of competitiveness - particularly in the IT sector could also enable social efficiency.

Sunhila and IT Enabled Services (ITES)

Sunhila entered the IT sector around 1995 and made some first steps into IT-enabled services. These efforts were supported by foreign investors and foreign development programmes, including AIDUS. Up to now, activities were limited to assembling activities (IT), and low-skilled jobs in Business Process Offshore Outsourcing such as simple data entry in the banking and insurance sector and call centres. Two years ago, an IT cluster near the capital in the Western part of the country, was created and some IT-specific training institutions were set up. The first experiences were quite successful and the government plans therefore to increase the efforts in the ITES field, particularly in banking and insurance, in order to increase their contribution to GDP, broaden the range of activities and, if possible, to move up to higher value-added activities, such as offshore software development and maintenance services, processing of financial transactions (credit card processing, insurance claims, debt collection) and back office services (accountancy).

The government sees attractive possibilities in this sector and would like to get a bigger share of the investment and the outsourced offshore contracts that currently benefit the bigger and more advanced neighbouring countries, mainly Koromandia but also Taifundia and Orkidia. This could help to reverse the trend of decreasing investment in Sunhila. Extensive privatisation of formerly state-owned enterprises helped boost FDI in the late 1990s, especially in 1997, but inward investment has been falling again since then.

The political background:

In some ways, the economic issues are not the main concern of the government. The country has been suffering from internal conflict for over 20 years with a rebel, separatist group active, and in some areas effectively in control, of eastern parts of the country.

After making a first step to beginning talks with the rebels, the ruling government's chief coalition partner resigned from the government. Since then, disagreements over the countries internal policies and its approach to the rebels and the nascent peace process have not been resolved.

The government has now no other choice than to announce early presidential elections (18 months before they are due). If it wants to change the current situation and win the elections once again, it has to increase considerably visible results in the economic, social and political state of the country. Leadership is a key issue for the voters. A firm and clear course of action should satisfy and convince voters that the present government have the vision and the policies best for the country. This could also help to balance
different interests in order to achieve positive long-term results for both economic competitiveness and development.

The run up to this election provides a good moment to have again a look at the promises – some of them quite populist and contradictory - of the last electoral campaign. These included, among others:

- Increase household income
- 70% salary increase for government workers
- 30,000 jobs to unemployed graduates
- Poverty reduction, especially in rural areas
- Bring down the relatively high cost of living (considering that income per capita is about US$ 900)
- Reduce inequalities, between rural and urban areas and among provinces
- Qualitatively better education and health
- Find solutions to ongoing political and social strife

But previous promises addressed not only the welfare of the Sunhilese population. In order to be in compliance with IMF and World Bank requirements, the government has also to keep an eye on GDP growth, inflation rate and other monetary indicators, public debt and the balance of payment. Macroeconomic and political stability should be the key target in order to raise the potential for an increase in international competitiveness.

**Does Sunhila need a competitiveness strategy? Will it help the government? Is it in the interest of the business community, or the IT sector?**

As you know, the government has asked various different actors to comment on the proposal for a competitiveness strategy focusing on the IT sector. Given the short time they have had to prepare this, the actors involved managed to access the following information. They all need now to filter, analyse and process to use it to back-up their arguments and to defend their position.

Unfortunately, the access to information is not at all perfect, so that actors are limited to the available data and do not know if all the other actors have access to the same information.
4. Information and resources on Sunhila

1. Resources and climate in Sunhila
Sunhila's climate is characterized by tropical monsoons, a northeast monsoon from December to March and a southwest monsoon from June to October. The rainy season is lighter in the northeast (autumn and winter): it is heavier in the southwest (summer and fall) with four times higher average rain falls. Cyclones and tornados are not unusual, and the country still suffers the consequences of a particularly strong earthquake. Sunhila has a rich natural resource base with limestone, graphite, mineral sands, gems, phosphates, clay and hydropower.

2. General economic conditions
From the mid 1950s to the mid 70s, the Sunhilese economy was based on inward-looking policies with heavy public sector controls of economic activities. However, in the late 1970s, it shifted away from a socialist orientation and abandoned statist economic policies and its import substitution trade policy for market-oriented policies and export-oriented trade. Since then, the government has been deregulating, privatising, and opening the economy to international competition. It is a member of many international organisations such as IBRD, IMF, UNCTAD, WIPO, ILO, and WTO. Sunhila's most dynamic sectors now are food processing, textiles and apparel, telecommunications, and insurance and banking. GDP grew at an average annual rate of 5.5% in the early 1990s until a drought and a deteriorating security situation lowered growth to 3.8% in 1996. The economy rebounded in 1997-2000 with average growth of 5.3%, but 2001 saw the first contraction in the country's history, -1.5%, due to a combination of power shortages, severe budgetary problems, the global slowdown, and continuing civil strife. Growth recovered to 4.5% in 2002 and to 5.9% in both 2003 and 2004, and the per capita gross domestic product (GDP) was about $950 (2004).

In 2003, political stability allowed further progress on macroeconomic stabilization during the first half of the year. Some progress was reversed, however, during the political uncertainty in November and December of the same year. Growth in 2003 was largely driven by the services sector (particularly telecom and tourism) and trade. Both exports and imports rose over 9% in the first 10 months. Interest rates declined. The inflation rate fell under 9%. External reserves were sufficient to cover 5.6 months of imports. Projections for 6.5% growth in 2004 did not account for political instability, which negatively impacted performance.

About 800,000 Sunhilese work abroad. They send home about $1 billion a year. The struggle by the separatist groups in the north and east continues to cast a shadow over the economy. Recently a major earthquake took nearly 40,000 lives in Sunhila and caused massive destruction of property. The United States is leading the international effort on relief and reconstruction, with damages estimated at $1.5 billion in Sunhila.
3. The Sunhilese Economy

National accounts:

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross domestic product(^a)</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
<td>100.0</td>
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<td>Industry</td>
<td>27.5</td>
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<td>26.7</td>
<td>26.6</td>
<td>26.5</td>
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<td>Services</td>
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<td>53.0</td>
<td>53.8</td>
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<td>54.5</td>
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<tr>
<td>Total consumption</td>
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<td>80.5</td>
<td>82.6</td>
<td>84.7</td>
<td>85.5</td>
<td>84.3</td>
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<td>Gross domestic fixed investment</td>
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<td>22.1</td>
<td>21.3</td>
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<td>Government investment</td>
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<td>3.0</td>
<td>2.0</td>
<td>2.3</td>
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<tr>
<td>Private investment</td>
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<td>24.7</td>
<td>21.0</td>
<td>19.3</td>
<td>20.0</td>
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<td>Exports (GNFS)(^b)</td>
<td>36.2</td>
<td>35.5</td>
<td>38.7</td>
<td>37.0</td>
<td>36.1</td>
<td>35.8</td>
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<tr>
<td>Imports (GNFS)</td>
<td>42.2</td>
<td>43.3</td>
<td>50.5</td>
<td>43.7</td>
<td>42.9</td>
<td>42.4</td>
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<td>Gross domestic savings</td>
<td>19.1</td>
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<td>17.4</td>
<td>15.3</td>
<td>14.5</td>
<td>15.7</td>
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<tr>
<td>Gross national savings</td>
<td>23.4</td>
<td>23.5</td>
<td>21.4</td>
<td>19.5</td>
<td>19.5</td>
<td>21.3</td>
</tr>
</tbody>
</table>

a. GDP at factor cost.  
b. "GNFS" denotes "goods and nonfactor services."

Sectors:

**Agriculture**: Major products are rice, tea, rubber, coconut, and spices.  
**Services**: Major types are tourism, banking, insurance and finance, transport, telecom.  
**Industry**: Major types are garments and leather goods, food processing, chemicals, refined petroleum, wood products, basic metal products, and paper products

### Gross Domestic Product at 1996 Prices

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</thead>
<tbody>
<tr>
<td>Real GDP Growth (%)</td>
<td>5.5</td>
<td>3.8</td>
<td>6.3</td>
<td>4.7</td>
<td>4.3</td>
<td>6</td>
<td>-1.5</td>
<td>4.5</td>
<td>5.9</td>
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</table>

### GDP per capita

<table>
<thead>
<tr>
<th>GDP per capita average annual growth</th>
<th>1983-93</th>
<th>1993 - 03</th>
<th>2003 - 07 (est.)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.9</td>
<td>2.9</td>
<td>5.1</td>
</tr>
</tbody>
</table>

4. **Trade**

- 31% of exports go to US  
- The Sunhilese export structure is not very diversified and relies mainly on textiles, tea, spices, diamonds, coconut products and rubber, what increases the economy’s vulnerability in case of external shocks.

**US – Sunhilese FTA**

The US largest single market for Sunhilese exports for more than two decades. It is also fifth largest source of imports. As in other recently negotiated FTAs, the US’s main emphasis is on opening up trade in services. The agreement will provide an opportunity to strengthen the financial structure of the country. In preparation for the negotiations, Sunhila has already lifted restrictions on foreign shareholding in the financial and insurance sector. For Sunhila, the most difficult demand to meet is to free capital transfers in the context of the investment regime envisaged under the FTA. Judging from previous negotiations, the US government may not be willing to concede exceptions to the principle of free capital transfers.
5. Monetary indicators and Exchange rates
Since 1978, Sunhila has operated with a system of "managed float". The degree of Central Bank intervention has varied over time, reflecting the exchange rate goals of the authorities. From January 2001, currency policy ostensibly shifted to a "free float". Since then, there has been substantial nominal depreciation of the Sunhilese Pound, more than compensating for Sunhila’s higher rate of inflation relative to trading partners and thus leading to modest real depreciation. By 2003 the real effective exchange rate was back to the levels of the early 1990s. After mid 2002, the Central Bank has intervened actively (despite the terminology of "free float") to build up reserves and moderate the nominal appreciation that would have otherwise occurred because of the US dollar’s depreciation against major currencies. The inflation rate was in 2004 (consumer prices) 5.8%.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>1998</th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>M2/GDP</td>
<td>37.1</td>
<td>38.7</td>
<td>38.5</td>
<td>39.2</td>
<td>40.1</td>
<td>40.2</td>
</tr>
<tr>
<td>Growth of M2 (%)</td>
<td>13.2</td>
<td>13.4</td>
<td>12.8</td>
<td>13.6</td>
<td>13.4</td>
<td>15.3</td>
</tr>
</tbody>
</table>

Price indices (YR82 =100)
- Merchandise export price index: 91.4 84.0 91.7 78.1 79.0 84.0
- Merchandise import price index: 94.7 97.0 108.2 87.1 85.7 84.9
- Merchandise terms of trade index: 96.4 85.6 84.7 89.6 92.0 99.0
- Real exchange rate (US$/LCU)$: 126.2 117.4 115.5 116.4 116.6 114.2
- Consumer price index (% change): 9.4 4.7 6.2 14.2 9.6 6.3
- GDP deflator (% change): 9.2 4.2 6.2 13.2 8.4 5.1

d. Consolidated central government.
e. "LCU" denotes "local currency units." An increase in US$/LCU denotes appreciation.

Investment
- Investment (gross fixed): 22.4% of GDP (2004 est.), significantly lower than in the late 1990s (27-28% of GDP)

Recent trends in Investment (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>1999</th>
<th>2000</th>
<th>2001</th>
<th>2002</th>
<th>2003</th>
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<tbody>
<tr>
<td>Investment</td>
<td>27.3</td>
<td>28.0</td>
<td>22.0</td>
<td>21.3</td>
<td>22.2</td>
</tr>
<tr>
<td>Government</td>
<td>3.2</td>
<td>3.3</td>
<td>3.0</td>
<td>2.0</td>
<td>2.7</td>
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<td>Public corp.</td>
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<td>2.3</td>
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<tr>
<td>Private</td>
<td>20.6</td>
<td>21.5</td>
<td>16.2</td>
<td>16.7</td>
<td>17.2</td>
</tr>
</tbody>
</table>

6. Foreign Direct Investment
Since the 1980s, Sunhila has had a liberal investment regime with FDI driving growth in labour-intensive industries. Most important investors came only in the 1990s. However, foreign direct investment did not achieve the levels of other countries in the regions that had similar initial conditions, such as Taifundia.

<table>
<thead>
<tr>
<th>FDI inflows per capita per year (US$)</th>
<th>FDI inflows as % of GFCF (gross fixed capital formation)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunhila 2.4 7.0 10.8 3.6 4.8 5.5</td>
<td>Bengaland 0.0 0.1 1.0 2.2 0.1 1.4</td>
</tr>
<tr>
<td>Koromandia 0.2 0.9 2.9 2.5 1.0 2.9</td>
<td>Taifundia 68.1 264.0 185.6 17.6 19.7 14.5</td>
</tr>
<tr>
<td>Orkida 22.5 33.1 64.9 22.1 3.8 13.6</td>
<td></td>
</tr>
</tbody>
</table>

Foreign direct investment, which had slumped to US$ 82 million in 2001, rebounded to US$ 242 million in 2002, but having reached US$ 170 million in first half of 2003 closed the year at US$ 229 million, amidst increased political uncertainties.

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Security became a major concern for potential investors when separatist groups started using violence to fight for their goals. In particular, large multinationals shifted their investments to neighbouring countries. Only excessively high returns could compensate for risks.

The majority of Foreign Investment has been through 100% foreign ownership. However, there has been a shift towards joint ventures when the Sunhilese private sector increased its technical and financial capability to provide strong partnerships with foreign investors.

By the year 2000, the FDI in services had overtaken investment in manufacturing. Investment is highly concentrated in two regions that account for 60% of total investment.

The Sunhilese government offers fiscal and other incentives to attract foreign investors. Incentives are highly variable (across products, sectors, scale of investment) and it is not clear, how important their direct impact on FDI is. Many companies are currently perpetual beneficiaries of tax holidays. See table below for incentives on offer:
### Fiscal Incentives

<table>
<thead>
<tr>
<th>Category</th>
<th>Min. Inv. (USD)</th>
<th>Min. Export Req. (% of output / income)</th>
<th>Full Tax Holiday</th>
<th>Concessionary Tax</th>
<th>Import Duty Exemption</th>
<th>Exemption from Exchange Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Manufacture of non-traditional goods for export, including deemed export</td>
<td>150,000</td>
<td>80%</td>
<td>5 Years</td>
<td>10%</td>
<td>Thereafter</td>
<td>N/A</td>
</tr>
<tr>
<td>2. Export-oriented services</td>
<td>150,000</td>
<td>70%</td>
<td>5 Years</td>
<td>10%</td>
<td>Thereafter</td>
<td>N/A</td>
</tr>
<tr>
<td>3. Manufacture of Industrial Tools and/or Machinery for the local market</td>
<td>150,000</td>
<td>N/A</td>
<td>5 Years</td>
<td>10%</td>
<td>N/A</td>
<td>Thereafter</td>
</tr>
<tr>
<td>4. Small Scale Infrastructure Projects: Power generation, Tourism and leisure, Warehousing and/or Cold Storage, Garbage collection and/or disposal, Construction of houses not less than 25 housing units in not more than 4 locations, Construction of hospitals</td>
<td>500,000</td>
<td>N/A</td>
<td>5 Years</td>
<td>10%</td>
<td>N/A</td>
<td>Thereafter</td>
</tr>
<tr>
<td>5.1 Information Technology (IT) and/or IT enabled Services</td>
<td>N/A</td>
<td>N/A</td>
<td>3 Years</td>
<td>10%</td>
<td>2 Years</td>
<td>If export oriented</td>
</tr>
<tr>
<td>5.2 IT related Training Institutes</td>
<td>N/A</td>
<td>N/A</td>
<td>3 Years</td>
<td>10%</td>
<td>2 Years</td>
<td>N/A</td>
</tr>
<tr>
<td>6. Regional Operating Head Quarters – Turn over in convertible foreign currency &gt; 70%</td>
<td>N/A</td>
<td>70%</td>
<td>3 Years</td>
<td>10%</td>
<td>2 Years</td>
<td>Yes</td>
</tr>
<tr>
<td>7. Any Industrial, Agricultural, Construction or Service or any other business activity approved by the Board subject to the concurrence of the Minister</td>
<td>5,000,000</td>
<td>N/A</td>
<td>3 Years</td>
<td>10%</td>
<td>2 Years</td>
<td>If export oriented</td>
</tr>
<tr>
<td>8. Research and Development</td>
<td>50,000</td>
<td>N/A</td>
<td>5 Years</td>
<td>10%</td>
<td>N/A</td>
<td>Thereafter</td>
</tr>
<tr>
<td>9. Agriculture and/or Agro-processing other than processing of Black tea</td>
<td>10,000</td>
<td>N/A</td>
<td>5 Years</td>
<td>N/A</td>
<td>Thereafter</td>
<td>N/A</td>
</tr>
</tbody>
</table>

#### 10. Export Trading House
- Export trading house exporting entirely of locally procured non-traditional products or re-exporting the entirety of imported products and location should be within an EPZ
  - Annual value of turnover (USD) 5 – 10 mm
    - 5 Years
    - Thereafter
    - N/A
    - Yes
    - Yes²
    - Yes
  - 10 – 25 mm
    - 5% tax up to 5 years
  - Over 25 mm
    - 0% tax for 5 years²
- Thereafter
  - Yes

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7. Labour market:

Labour productivity in US$:

<table>
<thead>
<tr>
<th>Sector</th>
<th>Total (Year 2000)</th>
<th>Total (Year 2002)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>1166</td>
<td>1104</td>
</tr>
<tr>
<td>Industry</td>
<td>3167</td>
<td>3259</td>
</tr>
<tr>
<td>Services</td>
<td>2622</td>
<td>3264</td>
</tr>
</tbody>
</table>

Employment and Unemployment in selected survey years

<table>
<thead>
<tr>
<th>Year</th>
<th>Sector</th>
<th>Agriculture</th>
<th>Manufacturing</th>
<th>Services</th>
<th>Participation rate (%)</th>
<th>Unemployment rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1963</td>
<td>Agriculture</td>
<td>52.6</td>
<td>9.1</td>
<td>38.0</td>
<td>32.7</td>
<td>16.6</td>
</tr>
<tr>
<td>1971</td>
<td>Agriculture</td>
<td>50.1</td>
<td>9.3</td>
<td>40.2</td>
<td>35.4</td>
<td>18.7</td>
</tr>
<tr>
<td>1973</td>
<td>Agriculture</td>
<td>54.6</td>
<td>9.2</td>
<td>35.7</td>
<td>33.9</td>
<td>24.0</td>
</tr>
<tr>
<td>1978/79</td>
<td>Agriculture</td>
<td>52.0</td>
<td>12.5</td>
<td>34.3</td>
<td>38.0</td>
<td>14.8</td>
</tr>
<tr>
<td>1981/82</td>
<td>Agriculture</td>
<td>50.5</td>
<td>12.3</td>
<td>35.5</td>
<td>34.3</td>
<td>11.7</td>
</tr>
<tr>
<td>1986/87</td>
<td>Agriculture</td>
<td>47.7</td>
<td>13.4</td>
<td>37.0</td>
<td>38.1</td>
<td>15.5</td>
</tr>
<tr>
<td>1990</td>
<td>Agriculture</td>
<td>46.8</td>
<td>13.3</td>
<td>38.4</td>
<td>61.9</td>
<td>15.9</td>
</tr>
<tr>
<td>1992*</td>
<td>Agriculture</td>
<td>42.1</td>
<td>13.1</td>
<td>43.2</td>
<td>48.2</td>
<td>14.6</td>
</tr>
<tr>
<td>1994*</td>
<td>Agriculture</td>
<td>39.5</td>
<td>14.3</td>
<td>45.4</td>
<td>48.7</td>
<td>13.1</td>
</tr>
<tr>
<td>1996*</td>
<td>Agriculture</td>
<td>37.4</td>
<td>14.6</td>
<td>46.5</td>
<td>48.7</td>
<td>11.3</td>
</tr>
<tr>
<td>1998*</td>
<td>Agriculture</td>
<td>40.3</td>
<td>14.2</td>
<td>43.6</td>
<td>51.7</td>
<td>9.2</td>
</tr>
<tr>
<td>2000*</td>
<td>Agriculture</td>
<td>35.7</td>
<td>16.8</td>
<td>46.8</td>
<td>50.7</td>
<td>7.7</td>
</tr>
</tbody>
</table>

Unemployment rate (2004): 7.8%

a: Agriculture includes forestry and fishing
b: Services include construction

Data excludes Northern and Western Provinces

- The rate of unemployment among high school and college graduates remains proportionally higher than the rate for less-educated workers. The government has embarked on educational reforms it hopes will lead to better preparation of students and fewer mismatches between graduates and jobs. In addition, it also has begun a youth corps program to provide employment skills to the unemployed. Creation of employment for educated youth requires transition of the Sunhilese economy away from its dependence on basic commodity exports and low cost advantage.

- The labour market is characterized by rigid labour regulations

- More than 20% of the 6.1 million-strong labour force, excluding the north and east, is unionised. Trade union membership is on the decline. There are more than 1,650 registered trade unions, many of which have 50 or fewer members, and 19 federations. Many unions have political affiliations.
Selected Formal Sector Wage Rates: December 1978=100

<table>
<thead>
<tr>
<th>Year</th>
<th>Agriculture Nominal Wage Rates Index</th>
<th>Agriculture Real Wage Rates Index</th>
<th>Industry and Commerce Nominal Wage Rates Index</th>
<th>Industry and Commerce Real Wage Rates Index</th>
<th>Services Nominal Wage Rates Index</th>
<th>Services Real Wage Rates Index</th>
<th>Central Government Nominal Wage Rates Index</th>
<th>Central Government Real Wage Rates Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1978</td>
<td>94.2</td>
<td>98.8</td>
<td>138.8</td>
<td>130.5</td>
<td>129.1</td>
<td>129.1</td>
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<tr>
<td>1979</td>
<td>123.1</td>
<td>111.3</td>
<td>130.5</td>
<td>129.1</td>
<td>129.1</td>
<td>129.1</td>
<td>117.3</td>
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<td>1980</td>
<td>153.6</td>
<td>138.8</td>
<td>130.5</td>
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<td>1981</td>
<td>153.9</td>
<td>151.0</td>
<td>146.4</td>
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<td>1982</td>
<td>181.2</td>
<td>161.0</td>
<td>169.7</td>
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<td>169.7</td>
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<td>1983</td>
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<td>161.0</td>
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<td>1984</td>
<td>250.2</td>
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<td>190.7</td>
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<td>190.7</td>
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<td>1985</td>
<td>273.5</td>
<td>203.9</td>
<td>190.7</td>
<td>190.7</td>
<td>190.7</td>
<td>190.7</td>
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<td>1986</td>
<td>288.1</td>
<td>224.3</td>
<td>190.7</td>
<td>190.7</td>
<td>190.7</td>
<td>190.7</td>
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<td>256.3</td>
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<td>196.6</td>
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<td>229.5</td>
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<td>334.9</td>
<td>245.9</td>
<td>245.9</td>
<td>245.9</td>
<td>245.9</td>
<td>421.8</td>
<td>421.8</td>
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<td>122.2</td>
<td>379.5</td>
<td>89.9</td>
<td>267.8</td>
<td>63.5</td>
<td>476.8</td>
<td>113.2</td>
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<td>577.7</td>
<td>122.2</td>
<td>459.6</td>
<td>97.1</td>
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<td>71.1</td>
<td>534.6</td>
<td>113.2</td>
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<tr>
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<td>126.1</td>
<td>510.8</td>
<td>97.1</td>
<td>365.9</td>
<td>69.6</td>
<td>557.6</td>
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<td>136.6</td>
<td>528.7</td>
<td>89.8</td>
<td>365.9</td>
<td>62.2</td>
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<td>555.8</td>
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<td>651.6</td>
<td>94.8</td>
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<td>66.5</td>
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<td>85.9</td>
<td>487.2</td>
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<td>81.4</td>
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<td>1097.7</td>
<td>115.0</td>
<td>807.7</td>
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<td>53.0</td>
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<td>1999</td>
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<td>2000</td>
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<td>559.7</td>
<td>52.8</td>
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<tr>
<td>2001</td>
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<td>919.7</td>
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<td>657.6</td>
<td>54.3</td>
<td>1310.8</td>
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<tr>
<td>2002</td>
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<td>95.6</td>
<td>986.5</td>
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<td>678.0</td>
<td>51.1</td>
<td>1525.0</td>
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<tr>
<td>2003</td>
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<td>98.0</td>
<td>1009.4</td>
<td>71.6</td>
<td>678.0</td>
<td>48.1</td>
<td>1525.0</td>
<td>108.1</td>
</tr>
</tbody>
</table>

8. Public Finances and Fiscal Policy

- Public debt: 104.3% of GDP (2004 est.)

- The challenge in designing tax policies to promote growth and fiscal consolidation is to reverse the massive decline in the tax-to-GDP ratio (from 19 percent in 1990 to 13 percent in 2003) and to do so in a manner which is supportive of growth and efficiency. The challenge is daunting given the sharp drop in trade taxes (from 6 to 2 percent of GDP since 1990); the stagnation of income taxes at around 2.5 percent of GDP, which is very weak by international standards.

- The scope for expenditure rationalization is significant, not least because of the need to address the duplication and overstaffing problems of the public administration. In addition, there is a serious imbalance in public spending, with the bulk of the budget being directed to fund recurrent costs (i.e., interest payments, wages, and subsidies) and very little to investment.

- The under-performance of state-owned enterprises worsens the current situation of public finances.
### Summary of Government Fiscal Operations (as % of GDP)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Revenue</td>
<td>22.3</td>
<td>21.1</td>
<td>20.4</td>
<td>17.7</td>
<td>17.7</td>
<td>16.8</td>
<td>16.6</td>
<td>16.5</td>
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<td>16.4</td>
</tr>
<tr>
<td>Tax Revenue</td>
<td>18.7</td>
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<td>17.8</td>
<td>14.5</td>
<td>14.5</td>
<td>15.0</td>
<td>14.6</td>
<td>14.0</td>
<td>13.2</td>
<td>14.5</td>
</tr>
<tr>
<td>Total Expenditure and Net Lending</td>
<td>34.0</td>
<td>31.0</td>
<td>30.5</td>
<td>26.3</td>
<td>25.2</td>
<td>26.7</td>
<td>27.5</td>
<td>25.5</td>
<td>23.7</td>
<td>23.1</td>
</tr>
<tr>
<td>Current Expenditure</td>
<td>20.1</td>
<td>22.3</td>
<td>23.1</td>
<td>19.6</td>
<td>18.7</td>
<td>20.2</td>
<td>21.6</td>
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<tr>
<td>Interest Payments</td>
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<td>6.7</td>
<td>6.7</td>
<td>7.4</td>
<td>7.1</td>
<td>6.0</td>
</tr>
<tr>
<td>Wages and Salaries</td>
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<td>4.9</td>
<td>5.2</td>
<td>5.3</td>
<td>5.3</td>
<td>5.5</td>
<td>5.5</td>
<td>5.5</td>
<td>5.6</td>
<td>5.2</td>
</tr>
<tr>
<td>Subsidies and Transfers</td>
<td>5.5</td>
<td>6.5</td>
<td>6.1</td>
<td>4.6</td>
<td>4.2</td>
<td>4.2</td>
<td>4.6</td>
<td>4.7</td>
<td>4.0</td>
<td>3.9</td>
</tr>
<tr>
<td>Capital Expenditure and Net Lending</td>
<td>14.0</td>
<td>8.7</td>
<td>7.4</td>
<td>6.7</td>
<td>6.5</td>
<td>6.5</td>
<td>5.9</td>
<td>4.6</td>
<td>4.7</td>
<td>5.5</td>
</tr>
<tr>
<td>Overall Balance (excluding grants)</td>
<td>-11.7</td>
<td>-9.9</td>
<td>-10.1</td>
<td>-9.2</td>
<td>-7.5</td>
<td>-9.9</td>
<td>-10.8</td>
<td>-8.9</td>
<td>-8.0</td>
<td>-6.8</td>
</tr>
<tr>
<td>Primary Balance (excluding grants)</td>
<td>-7.1</td>
<td>-3.5</td>
<td>-4.4</td>
<td>-3.8</td>
<td>-1.9</td>
<td>-4.2</td>
<td>-4.1</td>
<td>-1.5</td>
<td>-0.9</td>
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### Government Debt Indicators

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<td>95.1</td>
<td>96.9</td>
<td>103.2</td>
<td>105.4</td>
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<td>45.5</td>
<td>49.1</td>
<td>53.8</td>
<td>58.0</td>
<td>59.8</td>
<td>57.9</td>
<td>53.5</td>
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<tr>
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<td>45.3</td>
<td>45.9</td>
<td>43.1</td>
<td>45.3</td>
<td>45.6</td>
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<td>Total foreign debt/Exports</td>
<td>192.9</td>
<td>168.2</td>
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<td>115.5</td>
<td>126.4</td>
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<td>129.8</td>
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<td>Total debt service/GDP</td>
<td>9.4</td>
<td>11.3</td>
<td>9.4</td>
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<td>12.7</td>
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<td>65.6</td>
<td>53.0</td>
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<td>108.6</td>
<td>124.6</td>
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<td>o/w Domestic debt service/Gov’t. revenue</td>
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<td>51.0</td>
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<td>38.0</td>
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<tr>
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<td>23.4</td>
<td>26.2</td>
<td>22.2</td>
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<td>30.0</td>
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<td>46.9</td>
<td>40.5</td>
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<td>Foreign debt service/Exports</td>
<td>10.2</td>
<td>9.4</td>
<td>7.7</td>
<td>6.6</td>
<td>5.8</td>
<td>8.3</td>
<td>7.3</td>
<td>6.7</td>
</tr>
<tr>
<td>Domestic interest/GDP</td>
<td>5.5</td>
<td>4.7</td>
<td>4.8</td>
<td>4.9</td>
<td>6.0</td>
<td>6.7</td>
<td>6.4</td>
<td>5.2</td>
</tr>
<tr>
<td>Domestic interest/Gov’t. current expenditure</td>
<td>27.0</td>
<td>23.8</td>
<td>25.7</td>
<td>24.5</td>
<td>27.9</td>
<td>32.0</td>
<td>33.9</td>
<td>29.5</td>
</tr>
<tr>
<td>Foreign interest/Exports</td>
<td>3.4</td>
<td>2.7</td>
<td>2.2</td>
<td>1.8</td>
<td>1.8</td>
<td>1.9</td>
<td>1.8</td>
<td>2.2</td>
</tr>
</tbody>
</table>

### 9. Infrastructure

- Roads: only 10% of the paved road network in a good condition
- Telephone system: inadequate domestic service, particularly in rural areas; likely improvement after privatisation of national telephone company and encouragement to private investment; good international service

### Selected telecommunications Statistics

<table>
<thead>
<tr>
<th>Year</th>
<th>Wire-Line Connections</th>
<th>Cellular Connections</th>
<th>WLL Connections</th>
<th>Public Payphone Booths</th>
<th>Internet and email</th>
</tr>
</thead>
<tbody>
<tr>
<td>1996</td>
<td>254,522</td>
<td>71,079</td>
<td>527</td>
<td>3,002</td>
<td>2,504</td>
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<tr>
<td>1997</td>
<td>315,241</td>
<td>114,888</td>
<td>2,638</td>
<td>3,682</td>
<td>10,195</td>
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<tr>
<td>1998</td>
<td>455,598</td>
<td>174,202</td>
<td>67,931</td>
<td>4,761</td>
<td>18,984</td>
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<td>1999</td>
<td>580,199</td>
<td>256,665</td>
<td>88,914</td>
<td>5,799</td>
<td>25,535</td>
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<tr>
<td>2000</td>
<td>653,144</td>
<td>430,202</td>
<td>114,267</td>
<td>8,222</td>
<td>40,497</td>
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<tr>
<td>2001</td>
<td>708,200</td>
<td>667,662</td>
<td>118,995</td>
<td>6,801</td>
<td>62,159</td>
</tr>
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</table>

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### 10. Emigration, remittances

- Net migration rate: -1.27 migrant(s)/1,000 population (2005 est.)

<table>
<thead>
<tr>
<th>Year</th>
<th>Official data</th>
<th>Estimates</th>
<th>US$ million</th>
<th>% of GNP</th>
<th>% of Current</th>
<th>% of net</th>
</tr>
</thead>
<tbody>
<tr>
<td>1985</td>
<td>12.4</td>
<td></td>
<td>266</td>
<td>5.5</td>
<td>13.9</td>
<td>79.6</td>
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<tr>
<td>1986</td>
<td>16.5</td>
<td>285</td>
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<td>15.2</td>
<td>87.8</td>
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<tr>
<td>1987</td>
<td>16.1</td>
<td>351</td>
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<td>16.4</td>
<td>114.0</td>
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<td>1988</td>
<td>18.4</td>
<td>358</td>
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<td>5.7</td>
<td>15.9</td>
<td>137.0</td>
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<td>1989</td>
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<td>356</td>
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<td>42.6</td>
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<td>1992</td>
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<td>99.3</td>
<td>542</td>
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<td>101.3</td>
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<td>48.8</td>
<td>108.4</td>
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<td>73.8</td>
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<td>70.0</td>
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<tr>
<td>1995</td>
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<td></td>
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<td>14.0</td>
<td>133.5</td>
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<td>1996</td>
<td>162.6</td>
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<td>832</td>
<td>6.7</td>
<td>14.6</td>
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<td>1997</td>
<td>150.2</td>
<td></td>
<td>922</td>
<td>6.8</td>
<td>14.3</td>
<td>212.9</td>
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<td>1998</td>
<td>159.8</td>
<td></td>
<td>999</td>
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<tr>
<td>1999</td>
<td>179.7</td>
<td></td>
<td>1056</td>
<td>7.6</td>
<td>15.9</td>
<td>300.5</td>
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<td>1160</td>
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<td>8.1</td>
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<td>2001</td>
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<td>1155</td>
<td>8.4</td>
<td>15.8</td>
<td>329.6</td>
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<td>2002</td>
<td>203.7</td>
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<td>9.0</td>
<td>17.7</td>
<td>298.2</td>
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</table>

For the years until 1994, the data cover only workers sent though the Department of Labour and registered private employment agencies ('formal channels'). According to an airport survey of out-migration conducted by the Department of Labour during 1991-94, workers went though formal channels accounted for only 45% of total out-migration.

The role of the Sunhilese Diaspora for economic and social development has not been sufficiently considered so far.

### 11. The Sunhilese People/Social Indicators

- Total population: around 20 Million.
- Urban population: 23.6%
- There are various ethnic groups, the biggest one being the Sunhala (73.8%). Smaller groups are the Sunhilan Meers (7.2%), Koromandian Limat (4.6%), Sunhilese Limat 3.9%, other 0.5%, unspecified 10% (2001 census provisional data)
- **Infant mortality rate (2005 est.):**
  - total: 14.35 deaths/1,000 live births
  - male: 15.57 deaths/1,000 live births
  - female: 13.07 deaths/1,000 live births
- **Life expectancy at birth (2005 est.):**
  - total population: 73.17 years
male: 70.6 years  
female: 75.86 years

- **Public Expenditure Health (1995-2003):** 1.7 % of GDP  
- **Military expenditures (2004):** 2.6% of GDP

| Defense expenditure (1985-1998) annual % increase | 9.9 |
| Defense expenditure 1998 as % of GNP | 4.8 |
| Defense expenditure per capita 1998 (US$) | 39.2 |
| Armed Forces personnel % increase (1985-1998) | 80.5 |

- **Language** – different languages and dialects, English is not an official language but used by the government and spoken by about 10% of the population

- **High literacy rate (2003 est.):** *(definition: age 15 and over can read and write)*  
  total population: 92.3%  
  male: 94.8%  
  female: 90%

### 12. Education:

- Compulsory to age 14.  
- Primary school attendance: 96.5%.  
- Free education up to graduate level at State Universities.  
- Public Expenditure Education (1995-2003): 3.4% of GDP  
- Gender equality achieved at all levels of education

<table>
<thead>
<tr>
<th>Year</th>
<th>N° Govt. Schools</th>
<th>Students</th>
<th>Teachers</th>
<th>Students</th>
<th>Lecturers</th>
<th>Graduated</th>
<th>Educations Expenditure/GDP</th>
</tr>
</thead>
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<tr>
<td>1985</td>
<td>9,634</td>
<td>3,738,633</td>
<td>147,513</td>
<td>18,217</td>
<td>1,828</td>
<td>4,481</td>
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<td>9,657</td>
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<td>18,913</td>
<td>1,908</td>
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<td>9,709</td>
<td>3,974,905</td>
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<td>1,843</td>
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<td>9,771</td>
<td>4,058,843</td>
<td>147,578</td>
<td>24,558</td>
<td>1,825</td>
<td>589</td>
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<td>1989</td>
<td>9,805</td>
<td>4,179,520</td>
<td>159,243</td>
<td>24,640</td>
<td>1,811</td>
<td>1,277</td>
<td>3.23</td>
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<td>9,864</td>
<td>4,233,356</td>
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<td>29,471</td>
<td>2,040</td>
<td>4,476</td>
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<td>28,260</td>
<td>2,090</td>
<td>5,406</td>
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<td>182,758</td>
<td>31,447</td>
<td>2,265</td>
<td>4,564</td>
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<td>10,160</td>
<td>4,309,493</td>
<td>193,924</td>
<td>30,637</td>
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<td>5,056</td>
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<td>4,327,959</td>
<td>195,182</td>
<td>30,764</td>
<td>2,525</td>
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<td>10,239</td>
<td>4,351,022</td>
<td>195,210</td>
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<td>2,805</td>
<td>5,309</td>
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<td>8,737</td>
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<td>196,728</td>
<td>41,584</td>
<td>3,228</td>
<td>8,787</td>
<td>2.65</td>
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<td>4,340,412</td>
<td>194,773</td>
<td>48,296</td>
<td>3,241</td>
<td>9,874</td>
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<td>9,891</td>
<td>4,337,258</td>
<td>198,397</td>
<td>48,212</td>
<td>3,268</td>
<td>8,896</td>
<td>2.01</td>
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<td>9,829</td>
<td>4,179,217</td>
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<td>3,380</td>
<td>9,027</td>
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<td>2003</td>
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<td>4,097,335</td>
<td>194,920</td>
<td>59,734</td>
<td>3,543</td>
<td>9,512</td>
<td>2.22</td>
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</tbody>
</table>

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Sunhila has maintained high levels of educational attainment, although with severe disruption to the school systems in the conflict-affected areas. However, disappointing learning results point to weaknesses in the quality of education. Cognitive achievement tests among primary school children, for instance, show substantial shortfalls in mastery of basic language (especially of English) and numeracy skills. There are considerable inequities in the system, since children in rural schools do generally worse than in urban schools.

**13. Human Development Index:**
Sunhila ranks quite high compared to other developing countries.

<table>
<thead>
<tr>
<th>Country or group</th>
<th>HDI Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>World (average)</td>
<td>0.722</td>
</tr>
<tr>
<td>Sunhila</td>
<td>0.730</td>
</tr>
<tr>
<td>Developing Countries</td>
<td>0.655</td>
</tr>
<tr>
<td>Countries with high human development</td>
<td>0.908</td>
</tr>
<tr>
<td>Region</td>
<td>0.582</td>
</tr>
</tbody>
</table>

**Poverty and Inequality:**
  - National Headcount Index: 22.7
  - Urban Headcount Index: 7.9
  - Rural Headcount Index: 24.7

- **Income/Consumption distribution (1995-2003):**
  - Lowest quintile (% of income or consumption): 8.0
  - Highest quintile (% of income or consumption): 42.8
  - Gini Index: 0.47 (2002)

- Very uneven GDP shares by provinces (Western province: 48.1% in 2002, Northern province: 2.6% in 2002)

Surprisingly, for a country with a per capita GDP of about US$ 900, the head count ratio of poverty remains quite high at 22.7 percent. Furthermore, the rate of decline in this ratio has been modest and uneven over the last two decades despite sustained per capita GDP growth of over 3 percent per year. In part this reflects a skewed distribution of economic growth across sectors and regions. It also results from a long-term growth performance significantly below the country’s potential. Despite its early lead in social development, Sunhila has lost out in the growth stakes compared to the high-performing countries of the region like Taifundia and Koromandia.

**Per Capita Growth by Economic Sector (%)**

<table>
<thead>
<tr>
<th>Economic Sector</th>
<th>1991-96</th>
<th>1996-02</th>
<th>1990-02</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>-0.0</td>
<td>0.4</td>
<td>0.2</td>
</tr>
<tr>
<td>Industry</td>
<td>5.7</td>
<td>3.0</td>
<td>4.1</td>
</tr>
<tr>
<td>Services</td>
<td>4.4</td>
<td>3.3</td>
<td>3.8</td>
</tr>
<tr>
<td>GDP</td>
<td>3.9</td>
<td>2.5</td>
<td>3.2</td>
</tr>
</tbody>
</table>

**Poverty Trends 1990-91 to 2002 (%)**

<table>
<thead>
<tr>
<th></th>
<th>1990-91</th>
<th>1995-96</th>
<th>2002</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban</td>
<td>16.3</td>
<td>14.0</td>
<td>7.9</td>
</tr>
<tr>
<td>Rural</td>
<td>29.4</td>
<td>30.9</td>
<td>24.7</td>
</tr>
<tr>
<td>Estate</td>
<td>20.5</td>
<td>38.4</td>
<td>30.0</td>
</tr>
<tr>
<td>National</td>
<td>26.1</td>
<td>28.8</td>
<td>22.7</td>
</tr>
</tbody>
</table>

**14. Violent conflicts**
Ethnic disputes and violent conflicts, driven by separatist groups, precipitated in the 1980s a slowdown in economic diversification and liberalization and caused extensive political upheavals and economic uncertainty.
15. Political situation/Government
- Sunhila is a republic, the president is both chief of state and head of government.
- Economic reforms used to be politically driven. Until now politics contributed only in very limited terms to economic progress, since very short election cycles impede a coherent long-term strategy.
- The governmental apparatus is highly bureaucratic. There are e.g. 44 ministries (in comparison Germany has 13).

### Growth in Public Sector Employment, 1990-2001

<table>
<thead>
<tr>
<th>Sector</th>
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<th>2001</th>
<th>Increase</th>
<th>Annual Growth</th>
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<tr>
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<td>60,000</td>
<td>118,000</td>
<td>96.7</td>
<td>6.34</td>
</tr>
</tbody>
</table>

Between 1990 and 2001, public sector employment grew at 3.6 percent annually, outpacing growth in population and labour force. While keeping the wage bill in check, strong political commitment will be needed to address well-known constraints to public service delivery. These include overstaffing (particularly at the lower grades); excessive salary compression (8:1) which limits the public sector’s ability to attract skilled staff, administrative fragmentation, duplication, and wastage (partly exacerbated by the ineffective devolution of functions); and outdated processes and procedures.

The past two decades have witnessed substantial erosion of institutional capacity and economic governance in the nation’s administrative system. With 14 percent of the labour force employed in government (18 percent if the quasi-government sector is included), Sunhila has one of the largest bureaucracies per capita in the region with a ratio of 3.9 civil servants per 100 inhabitants. This bureaucracy is large, costly and suffers from low effectiveness and efficiency.

The incentive system is perverse. Government workers with the lowest levels of education on average earn almost double the wages of their private sector counterparts. Top policy-makers and professionals are insufficiently compensated. Controls on public recruitment have weakened over time. Despite the growing role of the private sector and increased privatization, government employees have risen in both absolute numbers and as a proportion of labour force.

- Political pressure groups and leaders: Different religious groups, labour unions (politicised); separatist Limats, group fighting for a separate state
- Due to overlaps in the work of different ministries, the Department of Commerce and Investment is in a quite weak position and needs to work out compromises together with other ministries and even institutions such as the Board of Investment. The general direction is to create a national trade and investment strategy in line with WTO principles.

16. Legal issues:
- Judges are appointed by the president (for Supreme Court and Court of Appeals)
- Very restrictive labour laws
- Member of different international organisations
- Bilateral agreements on trade and investment among others with the US and Koromandia
5. The potential of IT: Sector specific information

Key facts about ITES and BPO:
Readings:

- For a good general overview of the IT-enabled service sector and trends in investment in these areas, it is essential that all actors/students read UNCTAD: World Investment Report 2004, Chapter IV, p.146-180
- UNCTAD (2005): Expert meeting on new and dynamic sectors: Outsourcing and Development
- The Indian National Association of Software and Service Companies (NASSCOM) www.nasscom.org provides under Resource Center useful information about IT services, ITES, BPO both for the global market and the Indian industry. You can also access a BPO Forum and a SME Forum with more specific information.
- To get a quick and broader overview about trends in the Information technology sector you can check the executive summaries and rankings of the World Economic Forum’s Global Information Technology Reports (www.weforum.org)

Readings on TNCs, technology transfer and export competitiveness, e.g.:
UNCTAD 2003: Investment and Technology Policies for Competitiveness: Review of successful country experiences

Sunhila
Although Sunhilese firms have made headway in offering IT based services to a variety of International customers, other countries such as Koromandia and Taifundia have progressed far ahead over the last years. The industry believes that it can achieve US$ 1.0 billion in total ICT related export services by 2012 – however only with the right mix of industry coordination, support from academia and establishment of a policy environment conducive to ICT growth.

„The key to benefiting from ICT is to focus on policies to foster its use, rather than its production.“ (OECD, 2001)

To build up a successful ITES sector, Sunhila must develop the necessary human resources to understand and use ICT. In that way, ICT becomes not only the "tool" that enables the service you offer, it also provides a conduit for the kinds of organizational and cultural change that can have positive impacts on the domestic ICT industry through building demand.

Recent trends

- Exports in software development and related services increased from US$ 5.0 million in 1996 to US$ 55.0 million in 2001 and around US$ 70.0 million in 2003.
- Software services and ITES (exports and domestic market) contribute at the moment around 1.5 % of GDP, average growth rates of around 20% since 2002.
- Neighbouring countries, that entered the market earlier, have achieved annual revenues growth rates of around 35%.
- The sector consists of mainly foreign investors. These tend to be 100% foreign-owned. There are few joint-ventures.
- Relevant training and education: a strategy has to be formulated. Other countries have accredited IT-enabled services training centers that could, in the best case,
train 500 IT professionals per year. Another idea would be to shift university education towards IT, where another 1000 professionals could be trained.

**Skills and knowledge in the sector**

Developing this sector requires highly trained workers to design and develop new hardware and software systems and to incorporate new technologies. These workers—computer systems analysts, database administrators, and computer scientists—including a wide range of computer specialists. Job tasks and occupational titles used to describe these workers evolve rapidly, reflecting new areas of specialization or changes in technology, as well as the preferences and practices of employers. The following examples are indicative:

*Systems manager*: Systems administrators are generalists: they can wire and repair cables, install new software, repair bugs, train users, offer tips for increased productivity across areas from word processing to CAD tools, evaluate new hardware and software, automate a myriad of mundane tasks, and increase work flow at their site. In general, systems administrators enable people to exploit computers at a level which gains leverage for the entire organization. As well as graduate or post-graduate IT qualifications, this job requires experience and a high level of on-the-job learning.

*Systems Analyst/Engineer*: These professionals solve computer problems and apply computer technology to meet the individual needs of an organization. They help an organization to realize the maximum benefit from its investment in equipment, personnel, and business processes. Systems analysts may plan and develop new computer systems or devise ways to apply existing systems’ resources to additional operations. They may design new systems, including both hardware and software, or add a new software application to harness more of the computer’s power. As well as graduate IT qualifications, this job requires experience and a high level of on-the-job learning.

*Programmer*: they write, test, and maintain programs or software that tell the computer what to do. They convert project specifications and statements of problems and procedures to detailed logical flow charts for coding into computer language. They develop and write computer programs to store, locate, and retrieve specific documents, data, and information. This usually requires some kind of formal professional qualification (diploma, certificate)

*Computer Operator*: Computer operators load, run, and monitor computer systems. They keep records of computer operating times. They also keep records of problems that occur and how they are solved. They may assist users over the telephone. They may also help programmers test and debug new programs. Training in the particular system is obviously required for this role as well as a good IT knowledge, communication skills and literacy.

*Data Entry Operator* these jobs require staff to type information into a computer. In essence they take concrete information and put it into a digital form. For example, they enter lists of items, numbers, names, and other data into electronic forms or spreadsheets. Skills needed include general keyboarding, working with computers, attention to detail and following directions. High school level of education.

- Indicative labour costs (monthly wage rates in $US):

  - Systems manager: 300-850
  - Systems Analyst/Engineer: 250-650
  - Systems Operator: 200-600
  - Programmer: 150-300
  - Computer Operator: 100-250

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Example: in call center operations, labour cost accounts for 55 to 60 per cent of total cost. In Sunhila, manpower cost is approx. one-twentieth of what it is overseas. Entry-level agent cost in the US is ca. $40,000 per year while it is only $2,000 in Sunhila.

Security:
Until now there are no guidelines and policies for the implementation of common ICT standards and architectures and security framework. The government is becoming aware of the importance of security concerns of investors in IT services and IT Business Process Outsourcing. It passed recently an IT security act including laws concerning data security, confidentiality, privacy laws and cyber crimes. There is no information about the impact of the act.

Quality: Until now, only few companies have received recognized quality certifications such as ISO 9000.

Management: The International Labour Office (ILO) is currently providing assistance in management issues, such as labour-management cooperation. The demand for university programmes in business and management is steadily increasing.

Private Sector characteristics:
- Efforts to improve good corporate governance, including accountability and transparency
- Access clients and market information often difficult
- Access to finance and technology problematic, little venture capital, micro-credits in order to enhance participation of SMEs.
6. Information about competitors

Sunhila has two potential competitors in the IT/ITES sector, Bengalastan and Orkidia. Bengalastan would only be a competitive threat if Sunhila decides to compete on the basis of low labour costs, since these are even lower than in Sunhila. It is a less developed country, especially the education system, but also the infrastructure is far behind Sunhila. However, they managed to attract several foreign investors and to set up BPOO services (mainly data entry). Orkidia on the other hand is one step ahead shows several competitive advantages compared to Sunhila if the focus lies on quality and higher-value added activities within the sector as key competitive advantage.

Bengalastan

- GDP real growth rate: 4.9% in 2004
- GDP composition by sector: agriculture: 21.2%, industry: 27.1%, services: 51.7%
- Labour force - by occupation: agriculture 63%, industry 11%, services 26%
- 45% of population below poverty line
- Household income or consumption by percentage share:
  - lowest 10%: 3.9%
  - highest 10%: 28.6%
- Investment (gross fixed): 23.5% of GDP
- Public debt: 43% of GDP
- Telephone system domestic: modernizing; introducing digital systems; trunk systems include VHF and UHF microwave radio relay links, and some fiber-optic cable in cities
- Life expectancy at birth: total population: 62.08 years, male: 62.13 years, female: 62.02 years

Orkidia

- Orkidia has a well-developed infrastructure, a free-enterprise economy, and welcomes foreign investment. Orkidia was one of region's best performers in 2002-04. Increased consumption and investment spending and strong export growth pushed GDP growth up to 6.9% in 2003 and 6.1% in 2004 despite a sluggish global economy. The highly popular government's expansionist policy, including major support of village economic development, has raised concerns about fiscal discipline and the health of financial institutions. The government has pursued preferential trade agreements with a variety of partners in an effort to boost exports and maintain high growth, and in 2004 began negotiations on a Free Trade Agreement with the US.
- 10% population below poverty line
- Unemployment rate: 1.5% (2004)
- Investment (gross fixed): 22.5% of GDP
- Public debt: 47.6% of GDP
- Exports: $87.91 billion f.o.b. (2004), main export partner: US (15%)
- Imports: $80.84 billion f.o.b. (2004)
- Telephone system: general assessment: high quality system, especially in urban areas; domestic: fixed line system provided by both a government owned and commercial provider; wireless service expanding rapidly and outpacing fixed lines
- Literacy: definition: age 15 and over can read and write
  - total population: 92.6%
  - male: 94.9%
  - female: 90.5%
7. Individual instructions for actors
National Government (office of the President, the Prime Minister)

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the country and sector information provided by your lecturer/moderator.

You are at the moment in a very critical situation. Your coalition partner left the government due to fundamental disagreements on the government’s position regarding negotiations with violent separatist groups who have been actively demanding a separate state since the beginning of the 1980s. Even some ministers of your own party do not support you anymore. This means that you are ruling with only a minority of seats in the parliament. Since you do not see any possibility of the previous coalition partner returning to the government, you will need the support from the current opposition party in order obtain a meaningful victory in the elections.

The country is looking to you for leadership and a clear agenda on how to proceed politically. However, everyone also wants to be consulted: both national and international actors have made it clear that their interests should be integrated into any new policies and you need their support. Therefore, your interest should be to seek a compromise among actors.

You also have to continue with your economic development programme and have decided to focus on enterprise and national competitiveness as a key topic. Taking a broader view on competitiveness, you hope to integrate social issues, such as the creation of social capital, reduction of inequalities and poverty. You will have to find a solution to balance different goals - to foster economic growth, attract investors, keep in line with the conditions of the World Bank and IMF, to convince international donors to support your country through technical cooperation projects, to convince your voters and come back to political and social stability and to work for peace with the rebels. Not an easy task.

- You know that a diversification of the export base with a focus on services is important – from your current point of view and your level of knowledge you consider Business Process Offshore Outsourcing (BPOO) as the best option.
- You want to analyse possibilities of strengthening the IT services sector and of moving slowly from lower-end ICT jobs (assembling) and IT services (mainly data entry, and a few call centres) into high value-added activities (processing of financial transactions – credit card processing, insurance claims, debt collection). You still have to find out what is realistic and what would be the requirements to achieve this objective. You are also not sure if captive facilities, joint ventures or third party contracts are more beneficial for your country and more appealing in the run up to the election. Consultations with concerned actors might help you.
- Although the service sector has become the most important one, there is still a large share of voters and a strong lobby group working in agriculture and agricultural processing. Previous governments have heavily subsidized the agricultural sector but this did not lead to enhanced productivity and growth.
- You would also really like to get a higher score in the competitiveness reports in order to be more attractive to investors etc. (increase GDP, exports, IT indicators etc., keep inflation stable, avoid increase in public debt) and to improve the "brand" of your country.
- A long-term goal is to find a solution to ongoing social and political conflict.
- You see the need for enhanced public-private dialogue, but do not know how to achieve this.

Recent polls have suggested that welfare concerns are very important to voters: they are concerned about changes that might lead to them having to pay more for health and education.
US based Transnational Corporation (TNC)

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Position and Interests:

- Two years ago, you outsourced the majority (80%) of your data entry activities to Sunhila where you benefit from very low labour costs. Your interest is to have captive facilities where you employ sufficiently educated personnel (high-school level), but not highly-skilled labour. You are not really very familiar with the capacities of local SMEs and are not sure whether they could fulfil your quality and productivity requirements. Moreover, you have very limited experience with local culture in general and the business culture in particular. Therefore, you haven't considered until now to look for partners for joint ventures or third party contracts.

- You have heard about the plan of the Sunhilese government to move into higher-end activities. This is not very interesting to you since you have already outsourced more sophisticated services to Koromandia and Taifundia and what you need is low-cost, middle-skilled labour. For this type of labour you are actually considering relocating to an even cheaper country such as Bengalastan. Until now, higher incentives, better infrastructure and a better basic education keep you in Sunhila. You want to convince the government to keep the wages low and not to diversify away from the basic IT services sector.

- If you invest in the ITES sector you will want full protection. You are totally against any form of nationalization and expropriation.

- Security is another concern. Although your facilities are located in the region that is less affected by the conflict, you are prepared to threaten to leave the country if there is no progress in the negotiations with the separatists and in the worst case to actually pull-out completely.

- You ask the government to increase and broaden incentives.

- You are not very happy about recent problems with the labour union for ICT and IT services. You want less strict regulations regarding labour costs, clearer regulations so that restructuring and exit costs can be calculated, and the ability to hire and fire employees as commercial needs dictate.
Position and Interests:
You are representing SMEs in the IT and ITES sector and your objectives are to promote the development of innovative and locally relevant ICT solutions. You are concerned with improving SME's in the region both in terms of the quality of output and of labour conditions.

- SMEs want to benefit from potential in Business Process Offshore Outsource (BPOO) sector. However, when it comes to investment they are in favour of joint ventures with TNCs or even gradually more third party contracts. You feel that there is a niche for SMEs if they manage to develop into higher skilled BPOO activities. To that end you need support from both national and regional governments as well as business associations, labour unions and the educational sector in order to ensure the supply of skilled labour. You see a particular need for demand-driven educated university graduates.
- You see your SME as innovative and dynamic enough to be able to compete internationally.
- In your opinion, domestic development of technology and capacities and achieving competitiveness on the domestic skill level is the only way towards sustainable development.
- You want to make clear that SMEs are the backbone of the economy; not least as contributors to employment and growth, and that the government should not neglect them in favour of larger firms. They should not only be located in the most prosperous region but there should be an attempt to create many clusters throughout the country so that underprivileged regions can benefit. This would also help to reduce migration. Fostering SMEs means targeting aid to the poorest areas creating new job opportunities for the most disadvantaged sectors of the population. SMEs are more flexible and are more adaptable to local economic conditions than TNCs. SMEs are committed to Sunhila; they follow a long-term strategy and will not leave the country because it is suddenly cheaper to get the service from somewhere else.
- You understand that, as you develop, you might need co-operation with TNCs since it could enable economies of scale and it could provide SMEs with access to critical resources such as finance, technology and also managerial skills. However, you doubt that the TNCs that are currently in the country will be willing to enhance linkages with local SMEs. You rather fear that the presence of more TNCs will cause the decline and even closure of SMEs.
- One major problem is access to finance and this hampers the SMEs’ ability to improve their competitiveness. Reasons for this include lack of information about capital markets and possibilities, and the small size of SMEs makes them high-risk borrowers, paying much higher interest rates than larger firms.
- You are aware of the problem of guaranteeing quality standards. However, there is recently an important Diaspora of Sunhilese, people trained in Western countries, who are coming back to Sunhila and plan to set up companies in the IT/IT services sector. You want to highlight that you would not rely only on expatriate staff for management and technical positions but would hire Sunhilese residents for at least 50% of these positions.

Job creation in small enterprises remains the most promising avenue for expansion of employment opportunities. Entrepreneurship training assumes a vital importance, in this light. Modern and efficient small enterprises can provide the foundation upon which Sunhila competes in the world market. Many decent work deficits, including low skills levels and rudimentary technology persist in micro- and small enterprises as they
operate in the informal economy. By addressing these deficits, the work environments will become more conducive to productive work and enhance overall competitiveness. This is so both for the formal and the informal economy.
IT and IT Services Labour Union

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Position and Interests:
Trade Unions are active and politically influential in Sunhila and quite often their agenda intersects with and is driven by broader political agenda. There are several prominent ex-Trade Unionists in the current government. The Sunhilese labour market is also characterized by a quite poor relationship between employers and organized labour.

- You have to find a solution that addresses both the position of SMEs and employees of TNCs in the sector.

- You think that there would be more foreign capital flowing in through captive facilities, but you are primarily in favour of enhancing the role of SMEs. You see nevertheless their difficulties in becoming competitive in higher-skilled activities on a short-term basis, e.g. because of limited access to finance and technology. On the other hand, you know most of the SME management and you are convinced that they are dynamic, innovative and creative enough for the business and that they have sufficient market knowledge.

- National labour legislation is now under review. Reform will necessarily involve a tripartite dialogue between workers, employers, and the Government. A balance must be struck between labour-market flexibility and the protection of basic rights. You are against a total relaxation of labour regulations. Your goal is to avoid "hiring and firing" by the TNC. You would like to improve the social welfare in this context, having safety nets that incorporate both income and retraining.

- Currently at about 8 per cent, unemployment has been gradually declining. It remains relatively higher, however, among youth, females, and the disabled. Underemployment, at around 20 per cent of the total workforce, is very high. The "employed", meanwhile, include unpaid family workers and 1.2 million public sector workers, including employees of state-owned enterprises that are often identified as being overstaffed and inefficient.

You see the IT services sector as an important opportunity to provide work to the unemployed educated youth, but also to improve the employment situation of women, and even disabled. Underemployment would not occur and it could be an attractive sector that helps to reduce public sector employment, until now the most interesting option for educated people.

Technology and investment capital are not enough. Underemployment means human resources are under-utilized. Competitiveness in this age of globalisation also demands full development and employment of a nation’s human capital. No country can compete successfully while much of its labour force remains idle or unproductive. Economic growth policies must be people oriented.

- You are in favour of a demand-driven education (IT, English, Business etc.), over all educational levels.

- You want to increase minimum wages (currently at about $25-$30 a month), although you know that almost all employers pay above minimum wages.
Agriculture and Agricultural Processing Labour Union:

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Position and Interests:
Trade Unions are active and politically influential in Sunhila and quite often their agenda intersects with and is driven by broader political agenda. There are several prominent ex-Trade Unionists in the current government including the former Secretary General of the Agriculture Union. The Sunhilese labour market is also characterized by a quite poor relationship between employers and organized labour.

The slow growth of non-plantation agriculture is a primary factor explaining the persistence of poverty in Sunhila. The modest decline in rural poverty between 1990 and 2002 is consistent with a barely positive growth trend in per capita agricultural value added over the period.

- Since you represent both the agricultural sector and agricultural processing, you think that the governments' highest priority should be to lower poverty in the rural sector, where most people work in agriculture. Agricultural processing includes products such as processed fruits and vegetables, spices in value-added forms, fish processing, prepared animal feed, food colourings/additives, rubber based products, coconut based products, plant and animal extracts such as waxes, resins, gums.
- IT services might help to maintain or even increase GDP growth, but you see that there is not enough redistribution. You accuse the government of willingly increasing inequalities and disadvantages for the rural poor who are dependent on agriculture.
- 90% of the poor live in rural areas. The main constraints on development are cost of and access to credit, transport, and electricity.
- You want to raise your profile in the political programme in case the government wins the elections. One priority is to get the government to enforce decent working conditions in agriculture and agricultural processing. Decent work is about providing access to quality employment. It is also about protecting workers and their rights—an essential goal, if workers are to recognize a personal stake in enhancing competitiveness and productivity. The decent work agenda includes four main pillars: access to productive and remunerative jobs; a safe working environment; social protection and workers' rights; and social dialogue.
- You want to better education for workers in the agricultural sector and in rural areas
- You are in favour of increasing the use of ICT, but as a means rather than an ends. E.g. to provide access to information about weather forecasts, markets, prices, and to monitor microcredits. You are quite concerned about the digital-divide agenda, not just between countries but within countries, and are worried that further investment in ITES without comparable investment in rural areas would lead to greater social and economic inequality.

Your members have mainly experience the negative aspects of globalization and liberalization. Eroding competitiveness in the agricultural sector has led to job losses, deteriorating job quality, casualization of labour, and increases in informal work and child labour.
Representative of the education and training sector
You are the spokesperson of a nation-wide confederation of education and training institutions (funded by UNESCO, among other). Your organisation is very well represented by higher education institutions and the state-funded colleges.

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Compared to other developing countries, Sunhila enjoys impressive levels of basic education. The country has achieved high levels of educational attainment, although this is not the case in conflict-affected areas. Estimated adult literacy exceeds 90 per cent, with a high level of gender parity. Such literacy levels, however, have not translated into employable skills, especially among poor and marginalized communities. That means the human capital base is relatively high but not used for more complex production and services. Tertiary education suffers serious inadequacies. Disappointing learning results point also to weaknesses in the quality of education at both primary and secondary levels. Skills training institutes suffer from management deficiencies, outdated equipment and curricula, and a shortage of capable trainers.

Position and Interests:
- You want the institutions you represent to receive more funding from the regional and national governments to improve education at all levels.
- A lowering of the inequalities among different regions, both with regard to educational attainment and quality. You are afraid that the creation of clusters will further widen the gap between rural and urban areas. You have already some ideas how to provide better access to the poor to tertiary education, e.g. through a voucher system.
- Increase allocation for primary and secondary education by reallocating funds from tertiary education.
- You see the need for demand-driven and private sector relevant education (e.g. focus on IT and allowing English as medium of instruction). You want to defend state provision but think that some private sector participation in education, especially in tertiary education, should be encouraged. However, you believe that education should also educate the whole person and should just not focus on the skills that business wants. This requires more than the transfer of knowledge. Students have to be educated to think, to criticise, to learn and to apply - not to memorize information. Therefore, you want to give importance also to other disciplines such as humanities and social sciences that might have less direct economic relevance.
- Based on similar reasons, you want to increase and improve research in the country. You also think that local research can better contribute to solve local problems than the help from international consultants.
- At this point, education in Sunhila is highly centralised with the Ministry of Education having a lot of influence. You are convinced that decentralizing the system and delegating decision processes to schools, training centres and universities could improve education.
- You are convinced that formal education is not the only way of enhancing the human capital base of the country, but that the government has to think more about on-the-job training and continuous learning.
- e-learning could facilitate continuous learning - it is here where you see the most important role for Information and Communication Technologies.
- You are concerned about the high youth unemployment. In case of foreign investors setting up captive facilities you recommend the government to require at least 50% of the personnel to be recruited out of the young and unemployed.
- You are also concerned about the trend of increasing brain drain - both from rural regions to urban regions, among provinces and to foreign countries.
### Education Expenditure in Sunhila and potential competitor countries

<table>
<thead>
<tr>
<th>Country</th>
<th>% of national income</th>
<th>% of government expenditure</th>
<th>Average teacher salaries as % of national income per capita</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sunhila</td>
<td>2.9</td>
<td>6.8</td>
<td>1.5</td>
</tr>
<tr>
<td>Koromandia</td>
<td>4.1</td>
<td>12.7</td>
<td>3.0</td>
</tr>
<tr>
<td>Bengalastan</td>
<td>2.5</td>
<td>15.7</td>
<td>3.3</td>
</tr>
<tr>
<td>Orkidia</td>
<td>5.4</td>
<td>31.0</td>
<td>3.1</td>
</tr>
<tr>
<td>Taifundia</td>
<td>6.2</td>
<td>26.7</td>
<td>2.9</td>
</tr>
</tbody>
</table>
Regional Government

Do not limit your arguments to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Position and Interests:
You represent the economically prosperous region of Sunhila (western part of the country). Your region enjoys the highest income per capita, and highest indicators of education and growth. It is also the region that is most stable with regard to internal violent conflicts and social strife.

You are convinced that a country can only prosper if you invest in a region that has the potential to become the "leader", the pioneer in new industries and export markets, in terms of infrastructure, innovative businesses, access to education, vertical integration of the supply chain, entrepreneurship.

Your goal is to convince the government to locate a new ITES cluster in your region and to support the projects with funds. You want to attract investors to your region, mainly foreign investors because you expect that high FDI inflows will make the region internationally more attractive than in the case of national investment and that foreign presence will enable technology and skill transfer. You think that domestic SMEs should not enter the IT and IT services sector, at least not the export-oriented BPOO market, because they could not compete internationally.

You want - with the financial support of the national government - to transform your region into the knowledge centre of the country, and to enhance considerably the higher education and research infrastructure within the region. You feel that the best way of improving your region's human resources is to focus solely on business relevant knowledge such as IT, English and Business Studies.

But you are also concerned about the consequences of having the key clusters in the region, mainly with regard to inward migration. You would like the national government to avoid migration towards your region or at least additional support in handling an increasing population.
Position and Interests:

- Your primary political goal is to have independence for the Eastern part of the country. However, you are part of a new generation among the rebels who have been influenced by access to the Sunhilese Diaspora and you have recently adopted a more moderate rhetoric.

- You know that the government is at the moment in a kind of "trap". The coalition partner did not agree to new negotiations with you and left the government. On the other hand, the international community pressures the government to keep negotiating; even if it would lead to losing elections, if not there could be restrictions on international aid projects. Obviously, you will try to exploit this position to bargain for greater independence and autonomy.

- You are also concerned by issues relating to peace-building and the "peace dividend". You want to argue for more investment and better education in your region, the poorest one of the country, as both a driver and positive outcome of greater independence.

- You are also interested in direct aid specifically for your region, since it was the hardest-hit region in recent earthquakes.

- You definitely want political power, and national as well as regional representation in the parliament.

- You could threaten the government by announcing that you would start negotiating directly with the international development agencies, that you do not need the cooperation with the government.
Main opposition party

Do not limit your argumentation to the interests listed below. React to statements and positions of other actors and complete your "interest profile" after having analysed the provided country and sector information.

Position and Interests:
- You know that the government needs your support to win the elections. You might therefore be able to influence the government in its decision.
- You also know that the possibility of winning the elections by your own is quite limited. Therefore, you have to consider under what conditions you would enter a coalition with the current governing party and what compromises you would accept.
- You are in principle against negotiations with the violent separatist group in the Northern province.
- For you, liberalization and the fulfillment of requirements set by the international trading and financial systems have the highest political priority. When your party was in government in the early 1990s you were responsible for a series of controversial privatizations.
- You do not have a specific agenda on competitiveness at the time. Therefore, you do not present during session three but have to react to what the other actors say and outline your position, what you regard as key policy area for the country throughout the debates and informal consultations. You can try to win the support from different actors.
- You ask the government before their final presentation for a coalition talk. This is your opportunity to state your position concerns with regard to the consultations about competitiveness and social efficiency and point out if and under what conditions you would enter a coalition. Depending on previous negotiations with other actors you could influence the government's final decision explaining what actors and groups stand behind you.
8. References
(UNCTAD documents can be found on http://vi.unctad.org)

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