



# Globalization, the Knowledge Economy and Jordan's Missing Middle

**“Companies’  
Success Stories:  
Growth and  
Profits”**



**Amman, March 24th,  
2004**

**Tamer El-Meehy**  
Entrust: Development &  
Management Consultants



*The Economist, October 25<sup>th</sup>, 2003*

# The end of the Oil Age



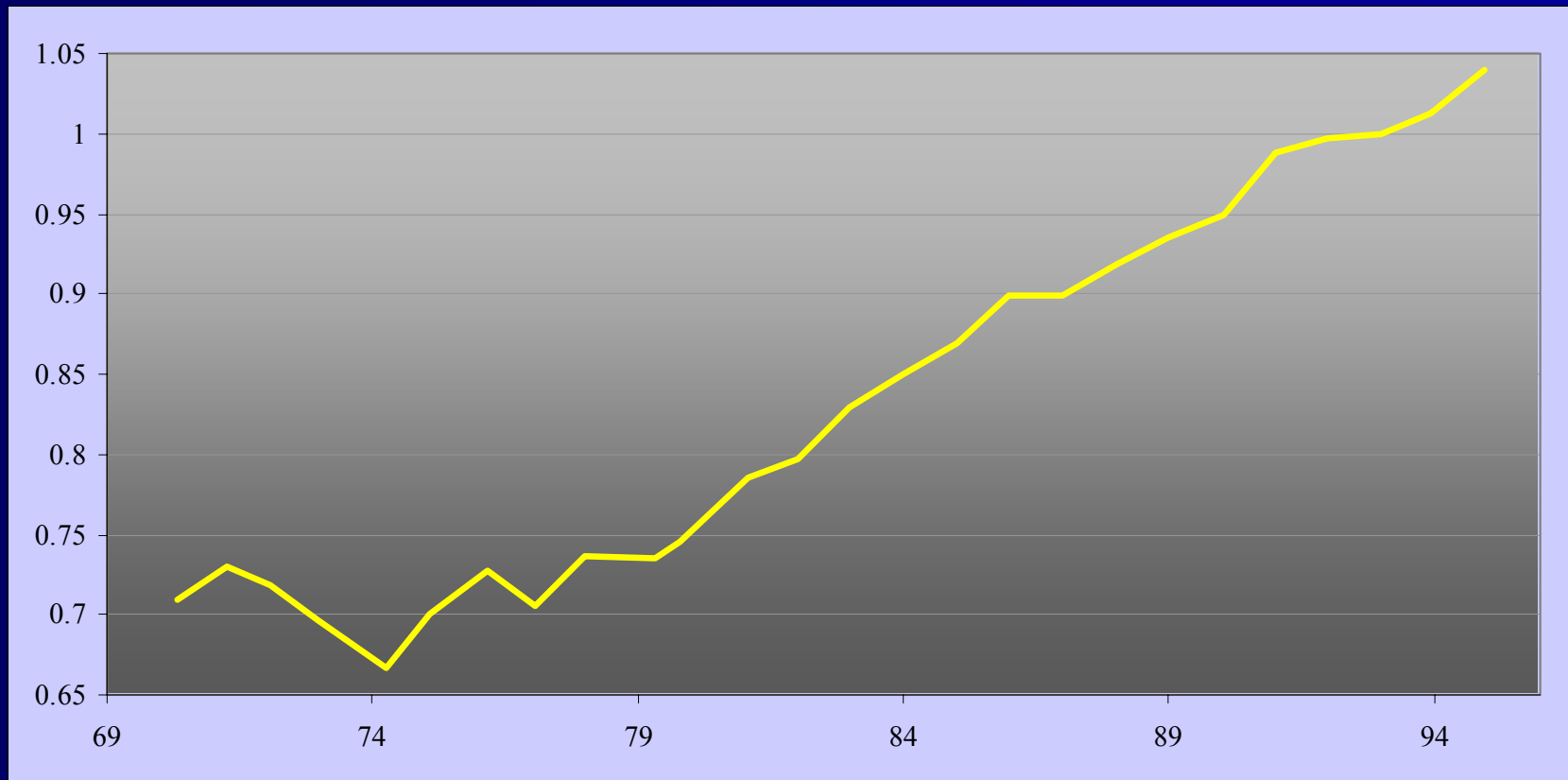


# Globalization

- **Internationalization of Production.**
- **Intensification of Trade.**
- **The Knowledge Economy.**
- **New Management Systems.**
- **New Division of Labor.**
- **Increased Capital Mobility.**
- **New Determinants for Competitiveness.**

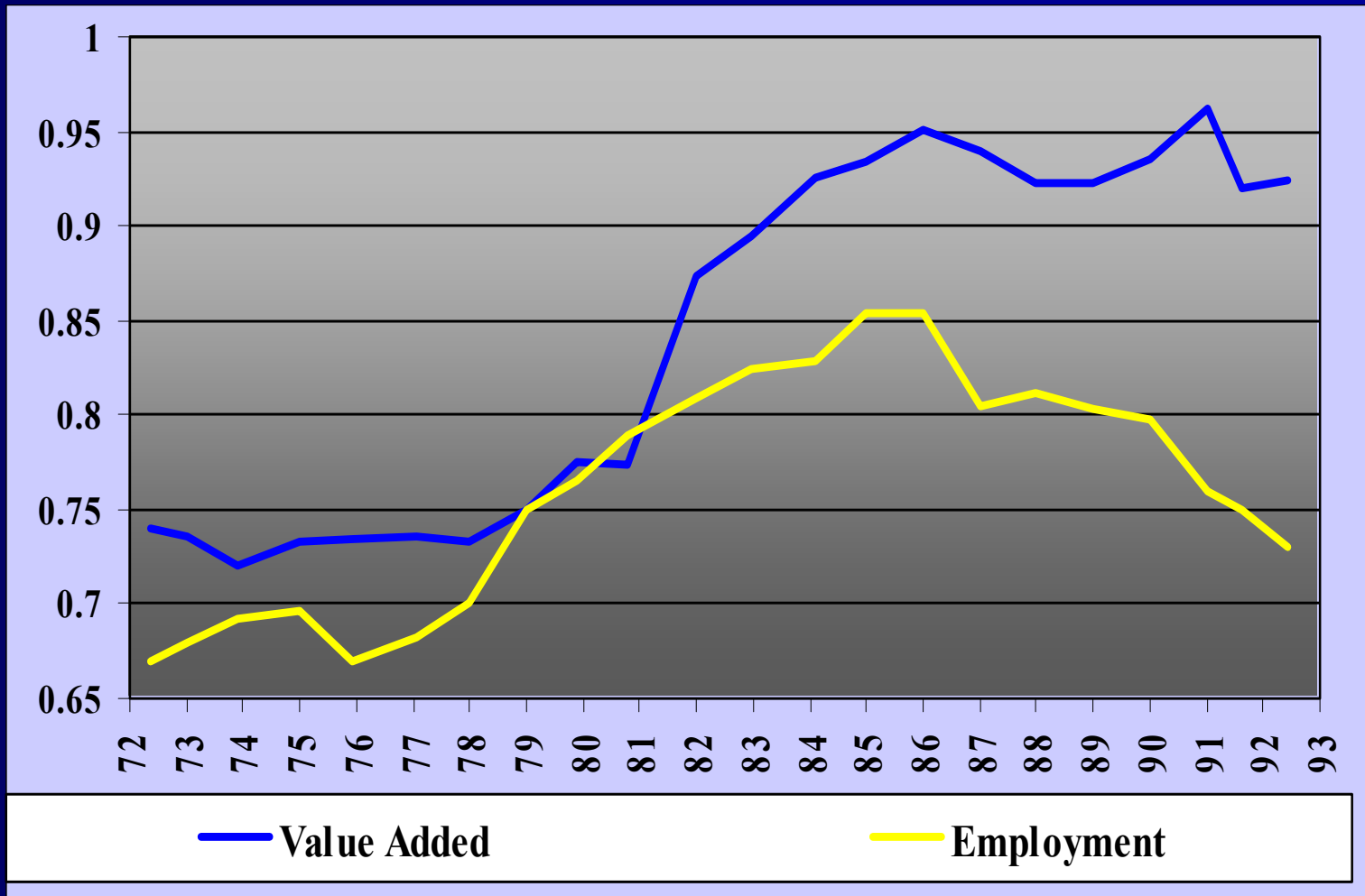


# The Knowledge Economy



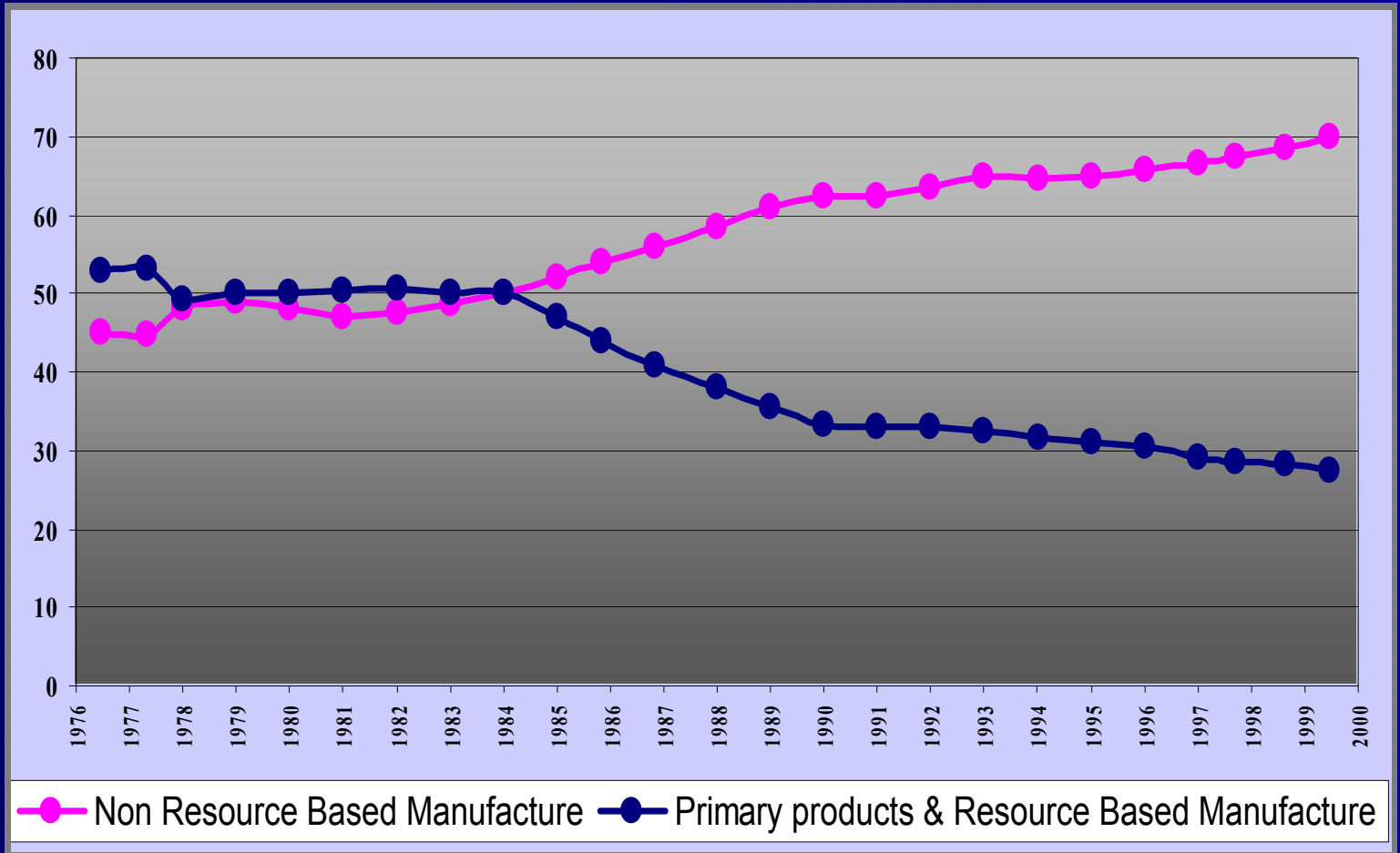


# The Global Knowledge Economy



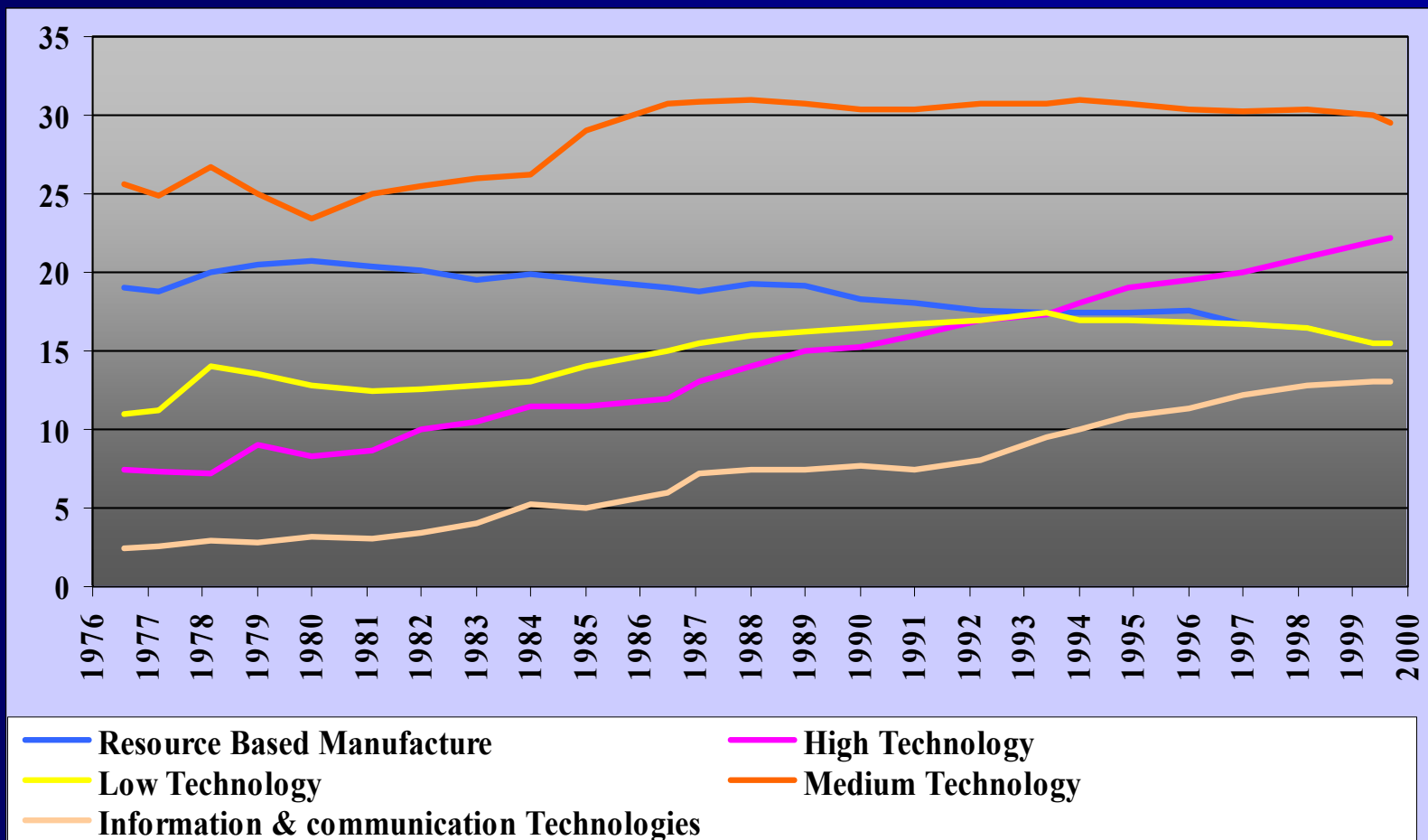


# Global Economic Trends





# Technological Composition of World Exports





# Competitiveness

- **Low Road:**

- **Natural Endowment.**
- **Labor intensive industries.**
- **Low-entry barriers industries.**
- **Price Competition.**
- **Race to the bottom**

- **High Road:**

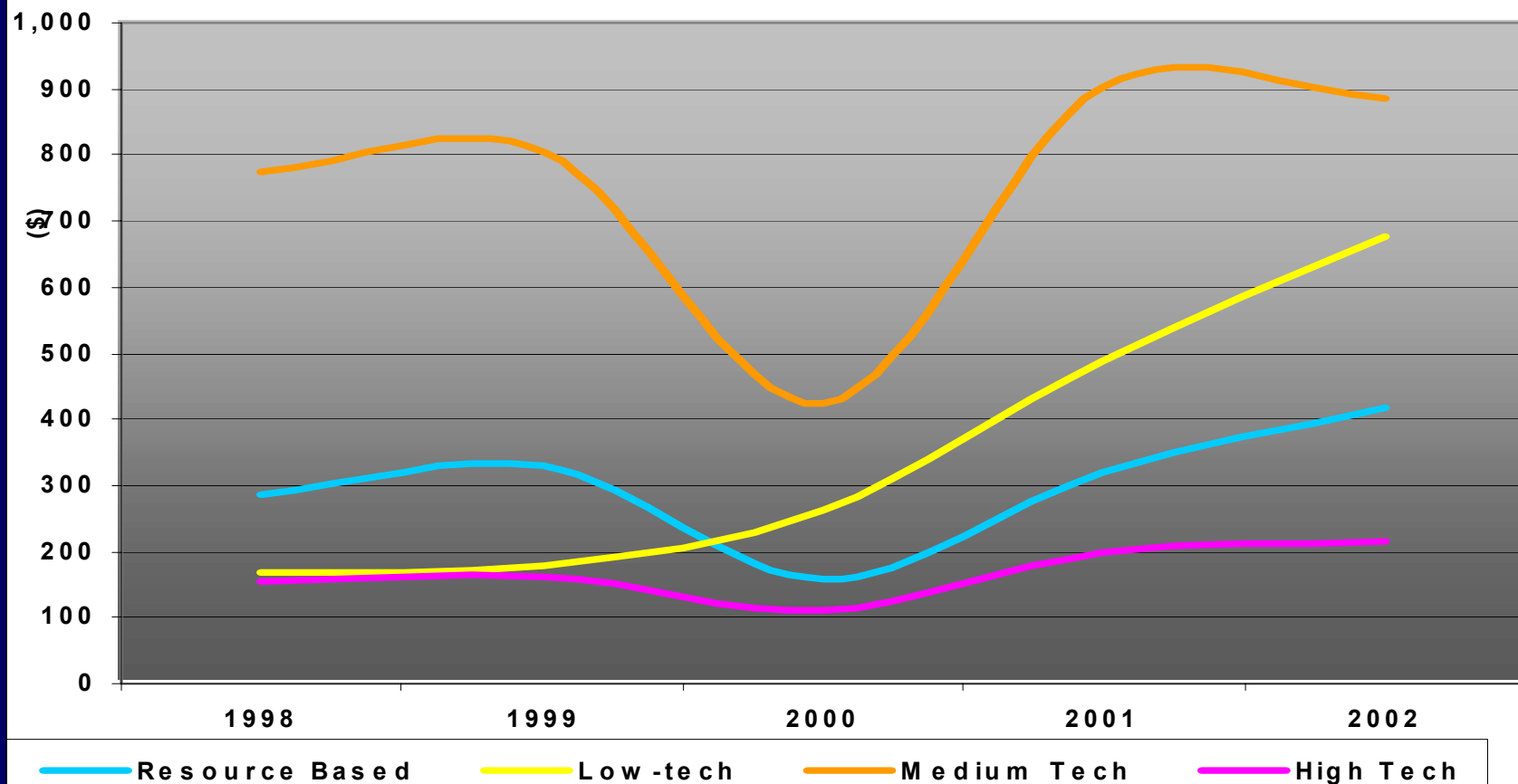
- **Value competition**
- **Knowledge**





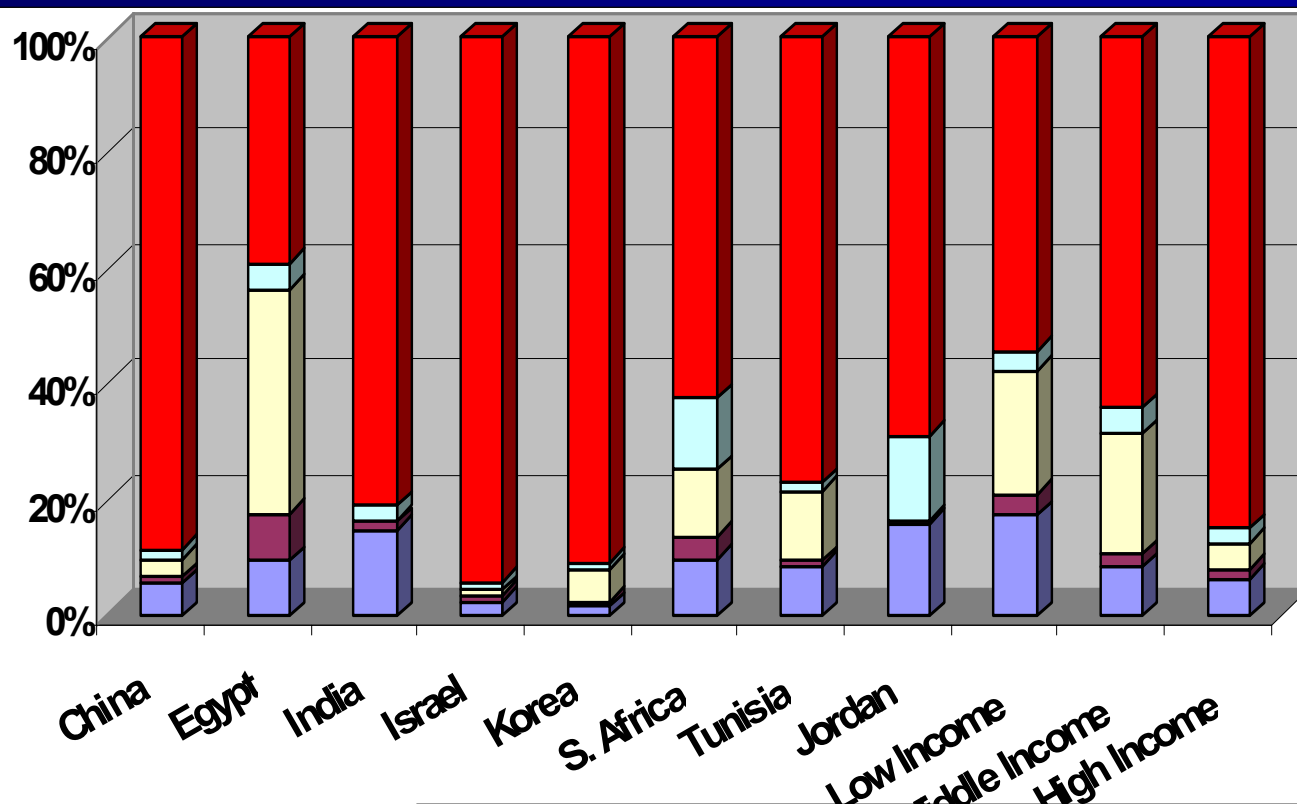
# Technological Composition of Jordanian Exports

Technological Composition of Jordanian Manufactured Exports  
(98-02) (\$ million)





# Jordan & Global Economic Trends



Structure of Merchandise Exports (2000)

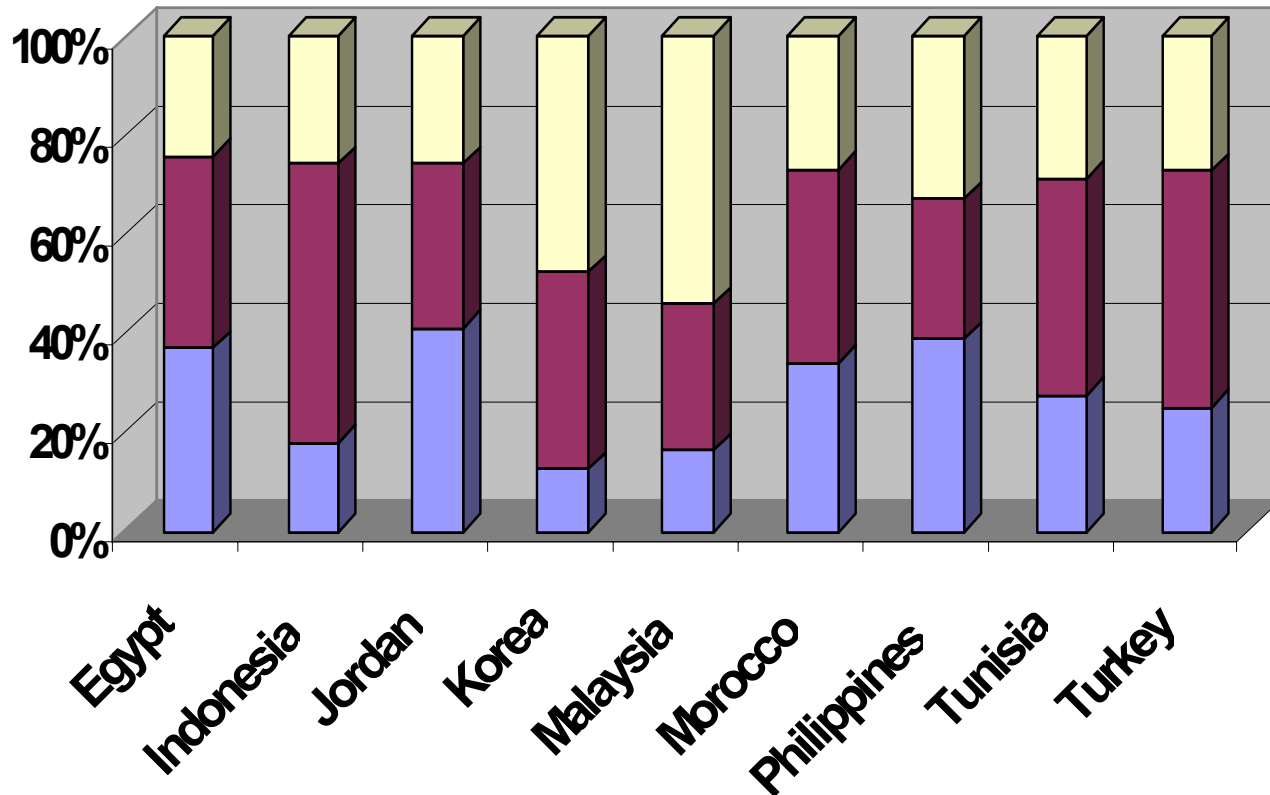
Source: World Development Indicators, 2002

- Food
- Fuels
- Manufactures
- Agricultural Raw Materials
- Ores and Metals



# Jordan's Technological Composition of Industrial Production

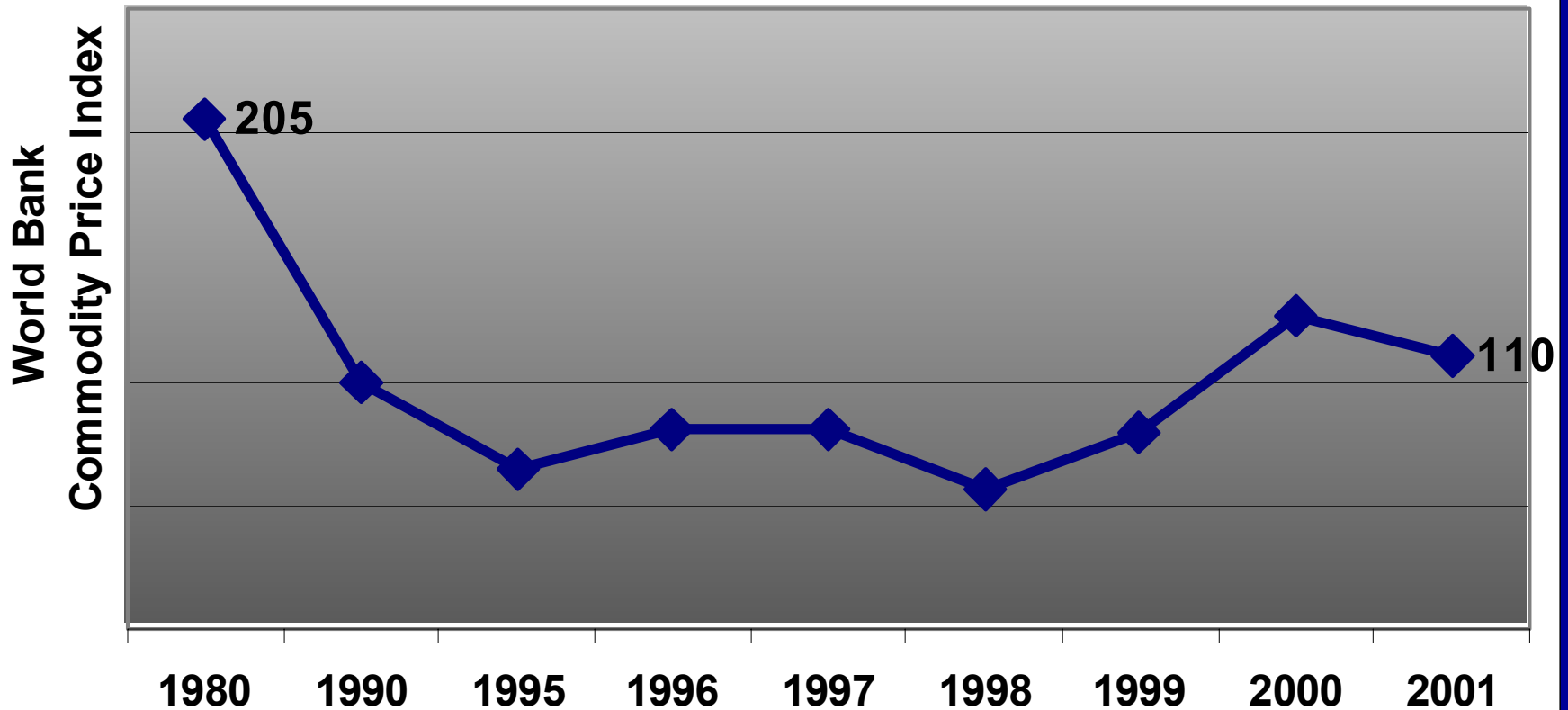
## Technological Composition of Production





# The Race to the Bottom: Oil

Price of Petroleum (1980 - 2001)





# The end of the Oil Age

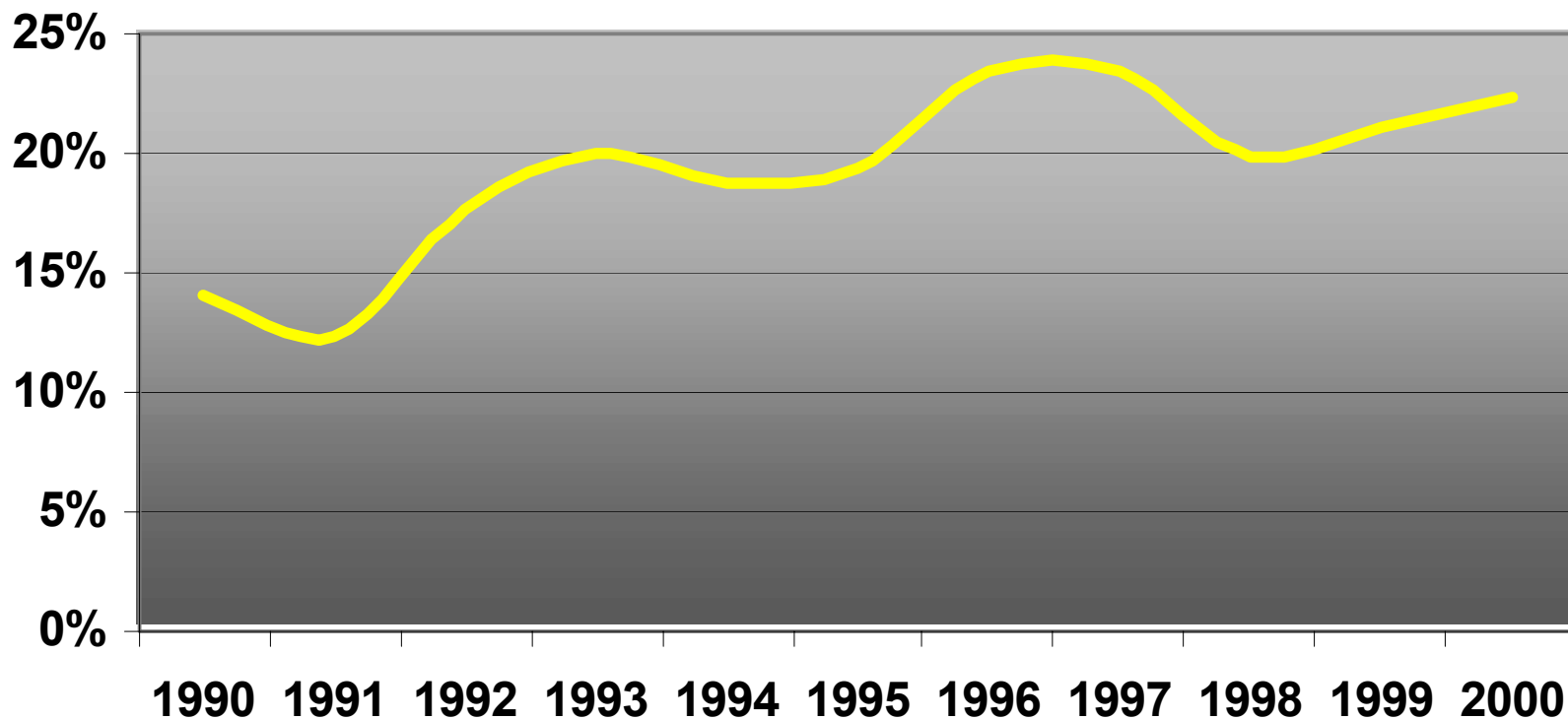
“The Stone Age did not end for lack of stone, and the Oil Age will end long before the world runs out of oil.”

*Sheikh Zaki Yamani, Ex-Minister of Petroleum, KSA*



# Remittances

Remittances (% of GNI)





# New Factors of Competitiveness

## (The High Road)

- **R&D and Innovation**
- **Technological Development**
- **Continuous Product Improvement**
- **High Skill HR Base**
- **Technical Capacity**
- **Systemic Factors**
- **Financial Systems**



**‘National prosperity is created, not inherited... Sustained productivity growth requires that an economy continually upgrades itself’**

***Professor Michael E. Porter, the  
Competitive Advantage of Nations***



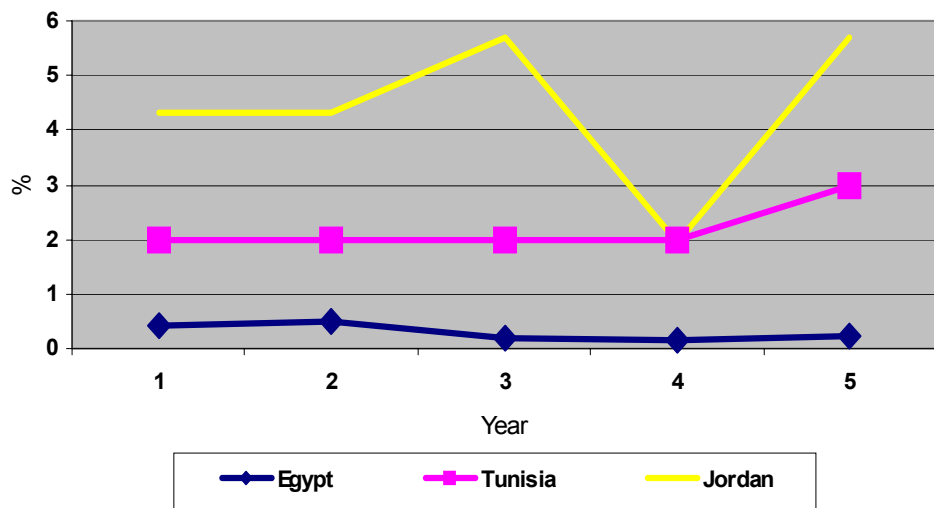


# Jordan & the Knowledge Economy

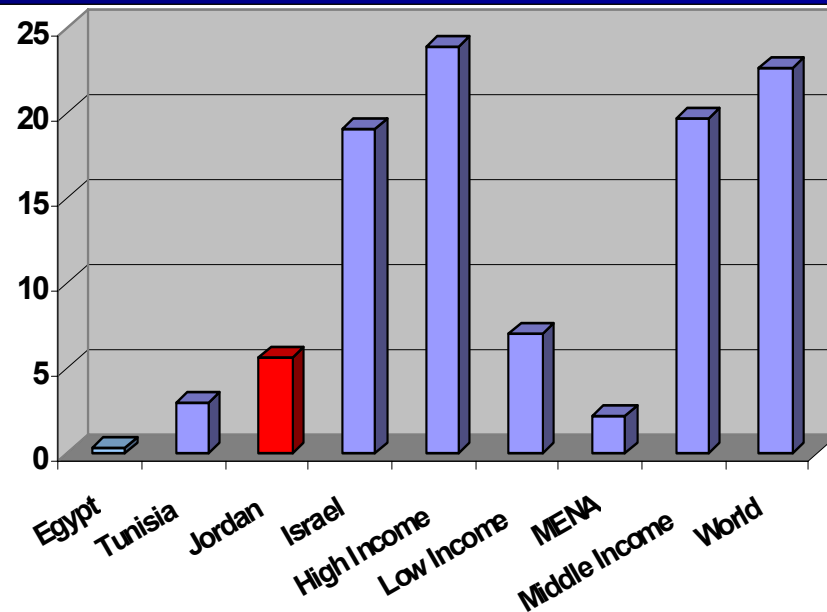
- **Adult Illiteracy: 10.3%**
- **Youth Illiteracy: 0.7%**
- **PCs per 1000 people: 22.5**
- **Internet Users: 127,000**



# Jordan's Hi-Tech Exports



High-Technology Exports (% of Manufactured Exports) 1995-1999  
Source: World Development Indicators, 2002



High Tech Exports as % of Manufactured Exports (1999)



# Jordan & the Knowledge Economy - Challenges

	<b>Jordan</b>	<b>Egypt</b>	<b>Israel</b>	<b>Tunisia</b>
<b>Engineers &amp; Scientists in R&amp;D/million</b>	94	493	1563	336
<b>Technicians in R&amp;D</b>	60	366	516	32
<b>Science &amp; Engineering Tertiary Students (%)</b>	26	12	49	33
<b>R&amp;D Expenditure (% of GDP)</b>	0.26	0.19	3.26	0.45
<b>High Tech Exports (\$M)</b>	89	12	7456	154



# Global Developments & SMEs: The Reality

- **Most SMEs, whether in developed or developing countries, are facing more intense competition and pressures.**
- **The majority of small enterprises perform poorly on the world market .**
- **Trade dynamism is less associated with direct SME exports, than with their indirect role through linkages with larger firms.**
- **Those most likely to survive are the medium enterprises that have export and growth potential.**
- **Modern SMEs typically stand a better chance of surviving the competition.**
- **Less than 20% of European SMEs can be considered modern.**



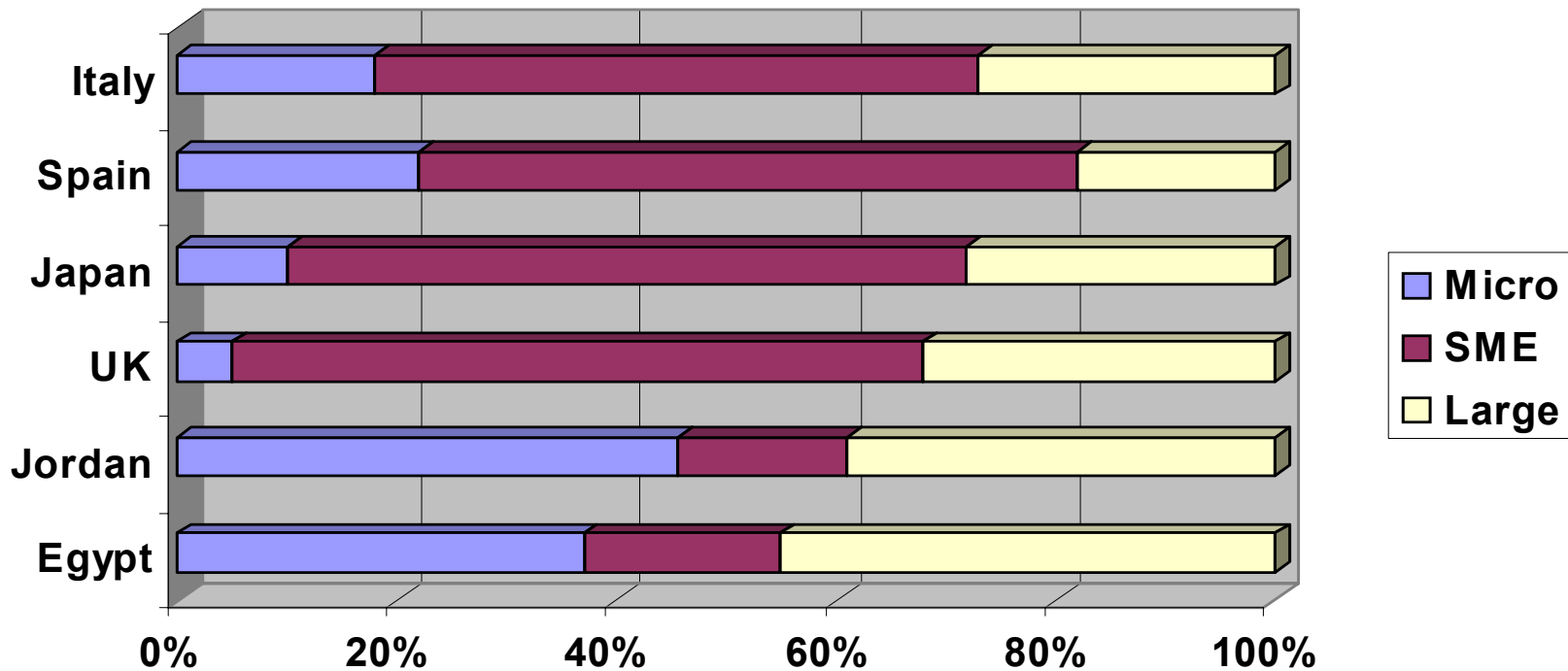
# Global Developments & SMEs: Opportunities & Challenges

- **Size-related Challenges**
- **Market Distortions / Failures**
- **Policy Biases**
- **SMEs are at a disadvantage with regards to R&D.**
- **Relatively low technological capacities.**
- **More intense competition.**



# Enterprise Size Structure: The Missing Middle Syndrome

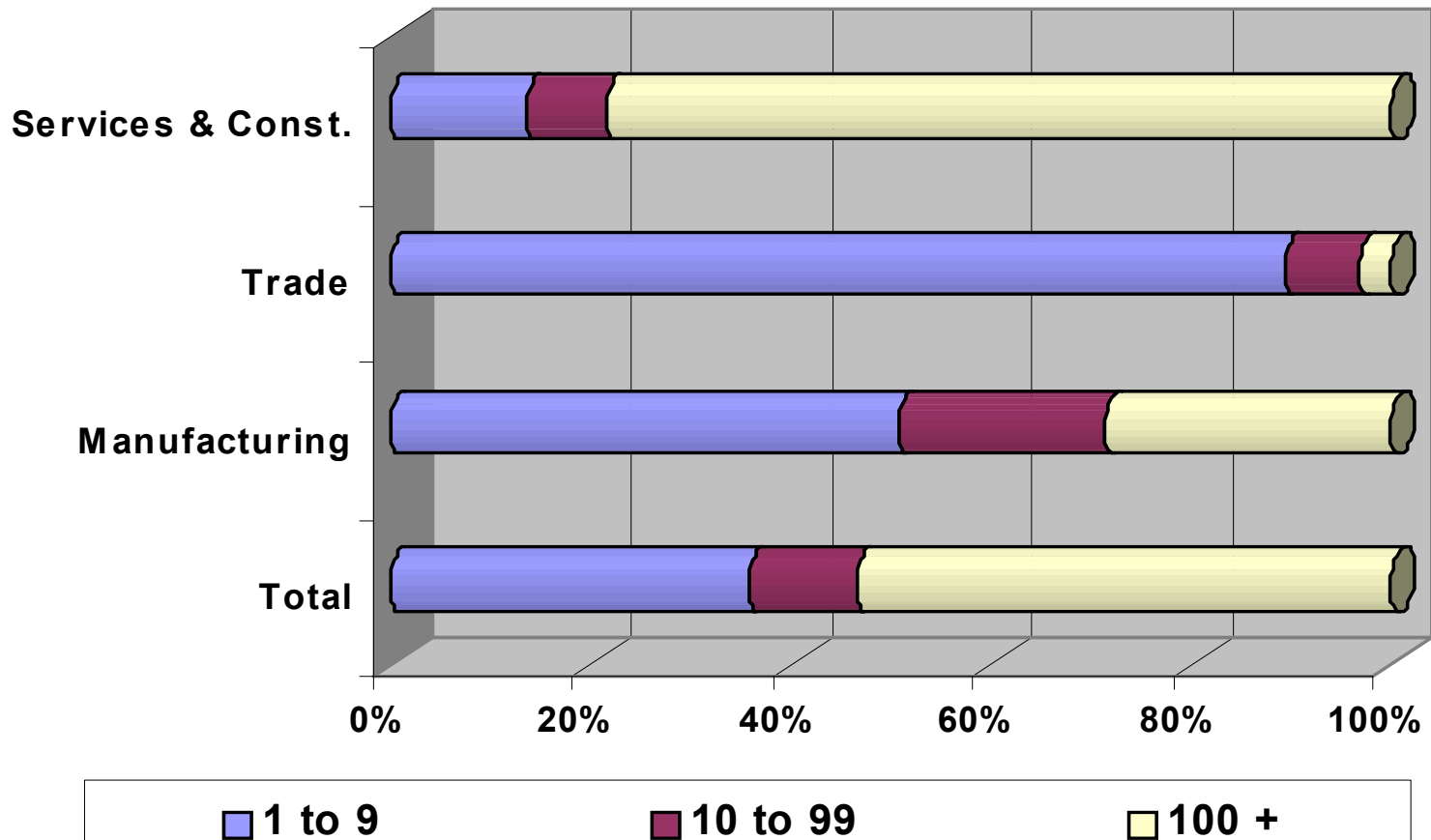
The Missing Middle: The Share of Manufacturing Enterprises in Employment





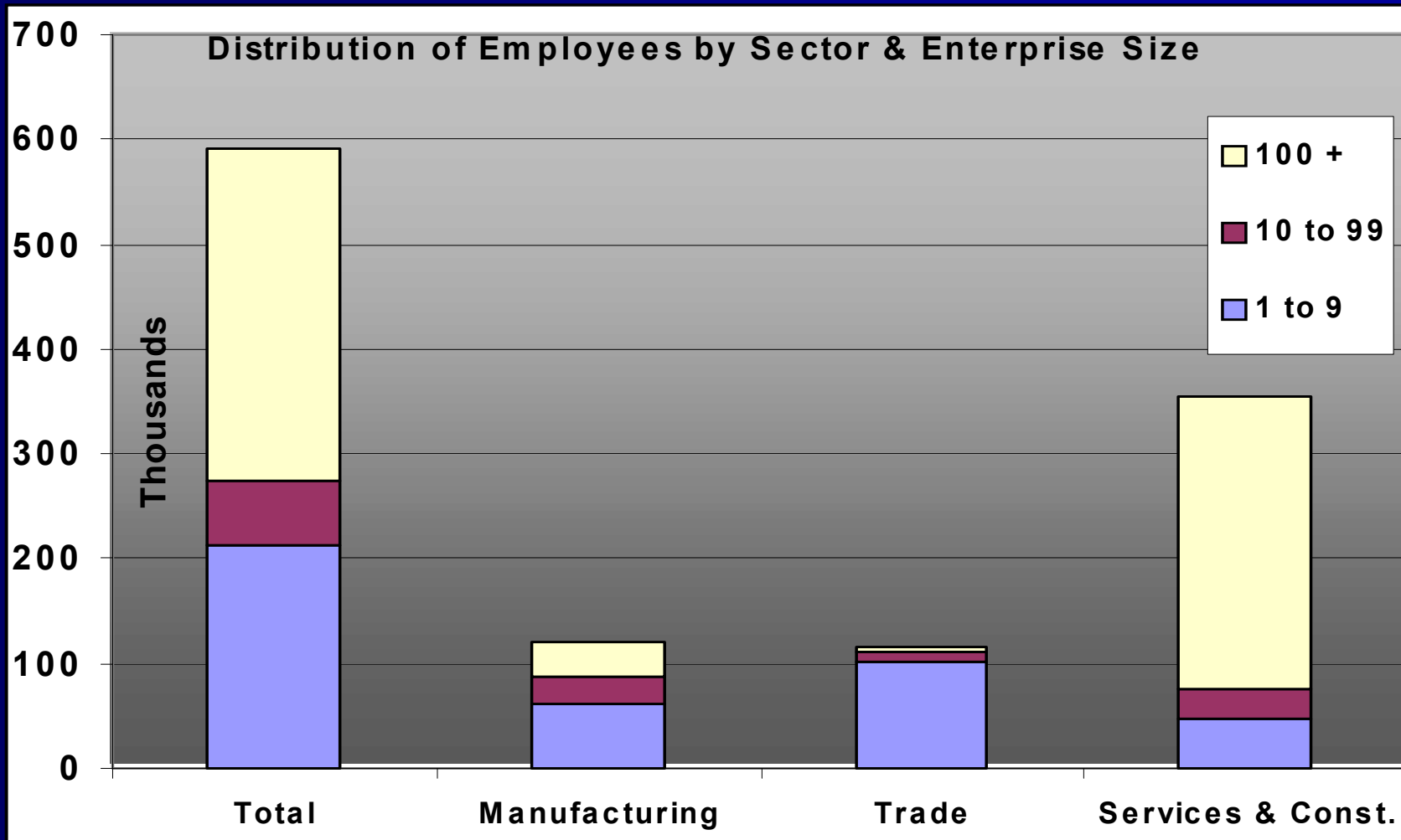
# Jordan's Missing Middle : A Closer Look

## Employment Distribution by Enterprise Size





# Jordan's Missing Middle : A Closer Look







# Effects of the Missing Middle Syndrome

- **Lack of linkages between SMEs and large enterprises** (Services for others account for 5 or 6% of the total revenues of manufacturing enterprises).
- **Lack of flexibility and competitiveness of large enterprises.**
- **High import content of production.**
- **High susceptibility of the economy to economic downturns.**



# Starting a business (LLC)

<i><b>Indicator</b></i>	<i><b>Jordan</b></i>	<i><b>MENA</b></i>	<i><b>OECD</b></i>
<i><b>Number of Procedures</b></i>	<b>14</b>	<b>11</b>	<b>6</b>
<i><b>Duration (days)</b></i>	<b>98</b>	<b>50</b>	<b>30</b>
<i><b>Cost (% of GNI/capita)</b></i>	<b>50.1</b>	<b>54.5</b>	<b>10.2</b>
<i><b>Min. Capital (% of GNI/capita)</b></i>	<b>2,404</b>	<b>1,104</b>	<b>61.2</b>



**The estimated total savings of Egyptians, Jordanians, and Syrians in OECD exceeds the GDP of those countries.**

***Source: Arab Competitiveness Report, 2003.***



# Financing a business

**Domestic Credit  
to Private Sector  
(% of GDP)**

<b>Jordan</b>	<b>77%</b>
<b>Ireland</b>	<b>109%</b>
<b>S. Africa</b>	<b>142%</b>
<b>Hong Kong</b>	<b>159%</b>
<b>Lebanon</b>	<b>92%</b>
<b>World (av.)</b>	<b>120%</b>



# Characteristics of Traditional SMEs

- **Concentrated in labor-intensive traditional activities.**
- **Predominantly serving local markets**
- **Low levels of productivity**
- **Little technological dynamism, if any.**
- **Lack of Innovation**
- **Reliance on personal savings.**
- **Traditional Management**
- **Poor product quality.**
- **Lack of cooperation & trust among entrepreneurs.**
- **Geographic & sectoral dispersal**



# Global Developments & SMEs: Some Successful Strategies

- **The Innovative Strategy**
- **The Information Technology Strategy**
- **The Niche Strategy**
- **Flexible Specialization**
- **Networking**
- **Clustering**
- **The Foreign Direct Investment Strategy**



# Guiding Principles

- **New Economic Strategies.**
- **Investing in Knowledge & Human Capital.**
- **Reorienting Scientific & Academic Institutions.**
- **Separating Myth from Reality regarding SMEs.**
- **Policy Coordination in industrial development, S&T, trade, education, SME Development...etc.**
- **Financial Deepening.**
- **Legal & Regulatory Reform.**



# The Way Forward: Old Bottles, New Wine

- **Collaborative Synergies.**
  - *Networking*
  - *Clustering*
  - *Linkages & Subcontracting*
- **Information Communication Technologies.**
- **Financing SME Development.**
- **R&D**
- **Access to Technology**
- **New Challenges for BDS**
  - *Information*
  - *Quality Certification*
  - *Product design & development*
  - *Benchmarking*
- **New Forms of FDI**