

World Competitiveness Yearbook (WCY) Jordan 2003

I. Introduction:

The World Competitiveness Yearbook (WCY) is an annual publication published by the Institute for Management Development (IMD). The IMD WCY looks at the relationship between a country's national environment (where the state plays a key role) and the wealth creation process (assumed by enterprises and individuals). It prefers to define world competitiveness as the ability of nations to provide an environment that fosters long-term economic added value and sustains the competitiveness of enterprises. Based on the idea that nations will compete fiercely to attract the best enterprises or the best investments, the WCY assesses an economy's ability to provide a healthy and stable investment environment through efficient structures, institutions and policies that encourage the competitiveness of enterprises.

This is accomplished through the extensive coverage of 59 economies participating in the Yearbook, 50 of which are countries while the remaining 9 are regions and local states, thus underlining the reality of a new dimension in competitiveness. Additionally, the participating economies are classified into two groups taking population as the main determinant in order to account for the very different nature of competitiveness in larger and smaller economies in terms of population. Group I comprises 30 economies with a population greater than 20 million, and Group II comprises 29 economies with a population less than 20 million. It is worth mentioning, that this is the first time Jordan participates in the WCY.

II. Methodology:

The WCY measures the ability of the participating economies- in light of their differing political, social and cultural dimensions, which enterprises must cope with- to create and maintain an environment that sustains the competitiveness of enterprises. In this regard, it divides the national environment into four main competitiveness factors determining an economy's overall performance and focuses on the outcome of their interaction. These are:

- Economic Performance:

The WCY assumes that healthy performance in this dimension can be achieved through competition governed by market forces, more competition in the domestic economy to increase the competitiveness of domestic firms abroad, and success in international trade. Furthermore, openness for international economic activities, international investment to allocate economic resources more efficiently worldwide and finally export-led competitiveness often is associated with growth-orientation in the domestic economy.

Seeing that the prosperity of a country reflects its past economic performance, the fulfillment of these principles contributes to creating a national environment that sustains world competitiveness.

- Government Efficiency:

In order to achieve a healthy performance in this dimension it is essential- apart from creating competitive conditions for enterprises- to minimize state intervention in business activities. Government should, however, provide macroeconomic and social conditions that are predictable and thus minimize the external risks for economic enterprise. Additionally, Government should be flexible in adapting its economic policies to a changing international environment, and provide a societal framework which promotes fairness, equality and justice while ensuring the security of the population.

- Business Efficiency:

In order to achieve a healthy performance in this dimension, it is necessary to integrate with the international economy to maintain a high standard of living, supply a skilled labor force,

improve the attitude of the workforce and increase productivity considering it reflects value-added. Furthermore, entrepreneurship is crucial for economic activity in its start-up phase, and efficiency, together with ability to adapt to changes in the competitive environment, are managerial attributes crucial for enterprise competitiveness. Finally, the provision of finance through a well-developed, internationally integrated financial sector facilitates value-adding activity.

- Infrastructure:

In order to achieve a healthy performance in this dimension, it is necessary to provide a well-developed infrastructure including efficient business systems, information technology and efficient and innovative application of existing technologies, in addition to efficient protection of the environment. Furthermore, long-term investment in basic research and innovative activity, adequate and accessible educational resources, and an improved quality of life are crucial.

On the basis of these four factors and 321 criteria, the WCY assumes that healthy performance in these dimensions creates a national environment that sustains World Competitiveness. The total of 321 criteria has been grouped into sub-factors and categories. However, each sub-factor does not necessarily include the same number of criteria. (See table 1)

Table (1): Number of criteria broken down to factor

Competitiveness Factor	Background Information criteria	Hard Data criteria	Survey Data criteria	Total
Economic Performance	41	33	1	75
Government Efficiency	11	21	49	81
Business Efficiency	13	20	36	69
Infrastructure	13	53	30	96

The WCY uses different types of data to measure quantifiable and qualitative issues. Hard Data (quantitative; statistics) are acquired from international, national and regional organizations, and private institutions worldwide. These statistics include 127 criteria used to determine the overall rankings and 78 criteria presented as valuable background information but not used in the calculation of the rankings. The 127 hard criteria represent a weight of approximately two-thirds in the overall ranking. The remaining 116 criteria are drawn from the annual executive opinion survey and are referred to as survey data. The survey data is used in calculating the overall ranking and represents a weight of approximately one-third.

To sum up, the WCY as a whole serves as an updated objective benchmark for decision-makers. Government agencies use it to benchmark their policies against those of other countries and to evaluate performance over time, while the business community uses it as a tool in determining investment plans and assessing locations for new operations. It is also worth mentioning that the IMD asks participating economies to send a list of five challenges they will most likely face in the coming year. This helps the economies examine the extent to which the challenges are reflected in and supported by the data in the Report.

III. Jordan's Performance:

The following analyses aims to examine Jordan's ability to create and maintain an environment that sustains the competitiveness of enterprises in light of the prevalent social, political and cultural dimensions of the country and assess its capacity to compete globally in the future in comparison to its main regional competitor Israel; the only other Middle Eastern country participating in the report other than Jordan. This is to be accomplished by examining Jordan's 2003 competitive performance using the WCY as the primary instrument, at three different levels:

- a. Jordan's overall rank amongst its population group.
- b. Jordan's performance in the four main competitiveness factors, which encompass
 - Macro-economic evaluation of the domestic economy.
 - Extent to which government policies are conducive to competitiveness.
 - Extent to which enterprises are performing in an innovative, profitable and responsible manner.
 - Extent to which basic, technological, scientific and human resources meet the needs of business.
- c. Main strengths and weaknesses that affect or influence Jordan's competitiveness.

Thereafter, it aims to provide adequate recommendations for both the private and public sectors.

a. Jordan's Overall 2003 Performance Among Group II (Population Less than 20 Million) Countries and Regions:

Group II consists of 24 countries and 5 regions thus comprising a total of 29 economies with populations less than 20 million. Finland heads this population group at 1st place. Jordan ranked last at 29th following Slovenia, while Israel ranked 22nd. Furthermore, the five participating regions in this category that are also new participants in this year's Yearbook; Ile-de-France (France), Bavaria (Germany), Rhone Alps (France), Catalonia (Spain) and Lombardy (Italy), all ranked better than Jordan at 15th, 18th, 19th, 20th and 24th respectively.

Jordan's overall 2003 performance indicates that it is the least competitive economy amongst its population group, reflected in its weak ability to create and maintain an environment that sustains the competitiveness of enterprises. However, when examining the economies in this population group in more detail, the following is apparent:

First, the GDP of the participating economies are significantly higher than Jordan except for Estonia and Iceland yet whose population is significantly less than that of Jordan as can be seen in appendix 1.

Second, given that GDP per capita is the broadest measure of national productivity, appendix 1 also reveals that Jordan is the only low-income status economy among 10 medium income and 18 high income economies.¹

Furthermore, more than 20 of the participating economies are first and second world.

Finally, when examining the 2003 GCR ranks of the economies that are common between both reports and comparing them to this year's IMD WCY results (see table 2), it is noticeable that all the countries ranked better than Jordan in both the Growth Competitiveness Index (GCI) and the Microeconomic Competitiveness Index (MICI) except for the Slovak Republic. Jordan received a better rank than the Slovak Republic in the GCI by 2 places, yet the Slovak Republic significantly outperformed Jordan in the MICI by 11 places. In brief, the above partially explains why Jordan ranked last overall in the WCY.

¹ This is based on the Income Status definition of the Global Competitiveness Report (GCR).

Table 2: GCR 2003 ranking vs. IMD 2003 ranking

Countries	GCR Ranking 2003		IMD 2003
	GCI	MICI	Rank
Finland	2	2	1
Singapore	4	9	2
Denmark	10	8	3
Hong Kong	17	19	4
Switzerland	6	5	5
Luxembourg	-	-	6
Sweden	5	6	7
Netherlands	15	7	8
Iceland	12	17	9
Austria	18	12	10
Ireland	24	20	11
Norway	9	21	12
Belgium	25	13	13
New Zealand	16	22	14
Ile-de-France	-	-	15
Chile	20	31	16
Estonia	26	36	17
Bavaria	-	-	18
Rhone-Alps	-	-	19
Catalonia	-	-	20
Czech Republic	40	34	21
Israel	19	18	22
Hungary	29	28	23
Lombardy	-	-	24
Portugal	23	36	25
Greece	38	43	26
Slovak Republic	49	42	27
Slovenia	28	27	28
Jordan	47	53	29

b. Jordan's 2003 Performance in the Yearbook's Four Main Competitiveness Factors:

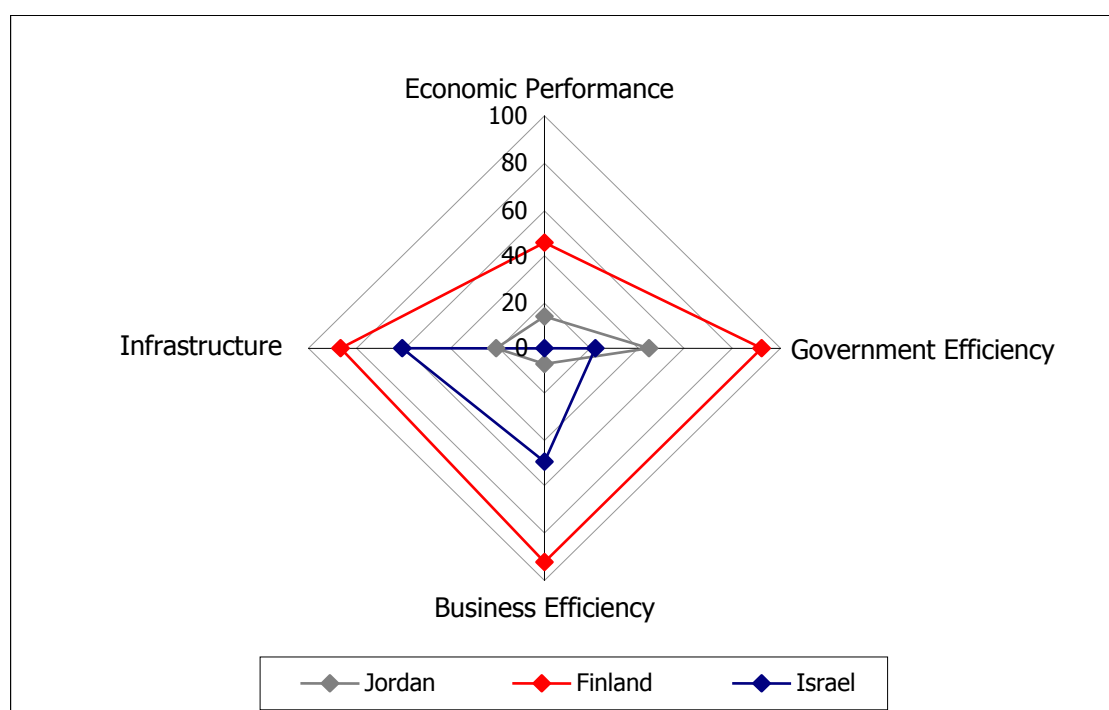


Figure 1: Performance in the Four Main Competitive Indicators According to the STD Values for Finland, Israel and Jordan.

Jordan's performance is assessed whilst taking Finland; the economy ranked first overall within this population group, and Israel as benchmarks.

In terms of Economic Performance, as can be seen in figure 1; Jordan preceded its regional rival Israel which ranked last (29th) by achieving 28th place. This indicates that Jordan outperforms Israel in terms of the macro-economic state of the domestic economy. Nevertheless, Jordan's rank in this indicator negatively contributed to its overall uncompetitive rank.

As for Government Efficiency, it can be observed that Jordan (17th place) is doing significantly better than Israel (27th place). This indicates that government policies in Jordan are more conducive to competitiveness than Israel thus providing a healthier environment for investment and enterprises in this regard.

In the Business Efficiency factor, Israel ranked 17th while Jordan ranked 28th indicating that the extent to which enterprises in Jordan, are performing in an innovative, profitable and responsible manner is minimal in comparison to the other participating economies in this population group.

The Infrastructure indicator enumerates the extent to which basic, technological, scientific and human resources meet the needs of business. In this indicator Israel (13th place) significantly outperforms Jordan, which ranked 26th.

c. Jordan's 2003 Performance in the Yearbook's Main Competitiveness Sub-factors:

The following sub-sections explore each of the four main competitiveness factors in more detail, whereby the analysis explores various weaknesses and strengths affecting Jordan's performance. Nevertheless, the WCY identifies the 10 weakest and 10 strongest criteria under each main competitive factor, which are listed in appendix 2.

1. Economic Performance:

Table 3: Economic Performance Sub-Factor ranks for Jordan, Israel and Finland, 2003

Competitiveness Sub-factors	Rank (Out of 29 Economies)		
	Finland	Jordan	Israel
- Domestic Economy	11	27	29
- International Trade	22	19	28
- International Investment	19	29	25
- Employment	24	28	27
- Prices	8	23	29

The Economic Performance Factor consists of five main sub-factors; the Domestic Economy, International Trade, International Investment, Employment and Prices. As can be seen from table 3, Jordan ranked better than Israel in three of the five sub-factors; the Domestic Economy, International Trade and Prices. Thus also explaining why Jordan ranked better overall in terms of Economic Performance as previously stated.

When focusing on the Domestic Economy, both Jordan and Israel attained uncompetitive ranks, although Jordan's rank outperformed Israel by 2 places. However, Israel's performance deteriorated over the past three years due to the escalation of political events particularly within Israel leading to economic instability. The fact that Jordan's Domestic Economy performance still needs to be enhanced is supported by its results in the indicators composing this sub-factor.

To elaborate, Jordan's results in the following indicators; Private Final Consumption Expenditure Indicator (81% of GDP), Government Final Consumption Expenditure Indicator (23.67% of GDP), and Gross Domestic Savings (-4.67% of GDP) indicate that total

Consumption Expenditure exceeds Jordan's GDP thereby explaining the shortage in Gross Domestic Savings. As a result, Investment is taking place through borrowing rather than Gross Domestic Savings, which may slowdown or even obstruct the economy's future growth.

Furthermore, according to IMD data a huge gap exists between the real growth of Gross Domestic Investment (7.32%) in 2002 and that of Gross Domestic Savings (-232.41%) in the same year; known as the 'Domestic Economic Gap'. This further supports the fact that investment in Jordan is increasingly being funded through loans from foreign sources, which can leave the Investment base in Jordan weak.

Additionally, the real growth in the services sector (4.3%) is less than that of Industry Production (6.3%). This negatively affects the performance of the domestic economy since the service sector in Jordan is the largest contributor to the GDP.

When examining the second sub-factor; International Trade, as previously stated, Jordan performed significantly better than Israel; preceding it by 9 places. This can be mainly attributed to the fact that even though Jordan's Current Account Balance is in deficit (-0.05% of GDP) it still maintained a rank of 16th place (i.e. its deficit is relatively low in comparison to the other economies within its population group). Furthermore, in spite of the current account deficit consequent to the fact that Jordan's imports of goods and commercial services as a percentage of GDP (72.01%) exceed that of its exports (47.54%), Jordan's real growth in the exports of goods and commercial services (8.8%) outperforms that of the imports of goods and commercial services (5.66%).

In terms of the International Investments sub-factor, Jordan ranked last (29th place), whilst Israel preceded it by 4 ranks coming at 25th place. This is mainly due to the fact that Direct Investment Flows Abroad in 2001 and Direct Investment Flows Inward for the same year are quite low reaching 0.09% (28th place) and 1.14% (28th place) of GDP respectively.

Moreover, Direct Investment Stocks Abroad for 2001 (US\$ -0.08 billion) are less than Direct Investment Stocks Inward (US\$ 1.68 billion) for the same year, which is also relatively low ranking at 28th and 27th place respectively, even though real growth in Direct Investment Stock Inward is relatively high (11.19%) ranking at 17th place in comparison to that of Direct Investment Stocks Abroad, which amounted to -6.67% (26th place).

When examining the Employment sub-factor, Jordan ranked 28th while Israel ranked 27th. Based on the IMD data Jordan's uncompetitive rank is the result of Employment as a percentage of population in Jordan being below standards reaching only 22.56% (29th place). This can be attributed to youth unemployment as a percentage of the labor force being 56% thereby ranking last in this indicator, taking into consideration Jordan's demographics whereby the majority of the population lies within the age range of 1-25 years. Furthermore, female participation in the labor force is still low yet rising. Note that the unemployment rate in Jordan is 14.9% (28th place).

In the final sub-factor (i.e. Prices), Jordan (23rd place) performed relatively better than Israel (29th place). This is mainly due to Jordan's competitive rank in the Consumer Price Inflation indicator in which it ranked 10th. As for the Cost-of-Living Index indicator, Jordan ranked 26th out of 28 economies², which is uncompetitive considering its index is high reaching 80.4 whilst that of New York is 100, thereby indicating that the cost of living in Jordan is fairly high.

² Total ranks are out of 29 economies however; in such cases there is a lack of information for some economies.

2. Government Efficiency:

Table 4: Government Efficiency Sub-Factor ranks for Jordan, Israel and Finland, 2003

Competitiveness Sub-factors	Rank (Out of 29 Economies)		
	Finland	Jordan	Israel
- Public Finance	9	26	28
- Fiscal Policy	10	5	22
- Institutional Framework	1	18	29
- Business Legislation	1	23	21
- Societal Framework	1	20	26

The Government Efficiency Factor consists of five main sub-factors; Public Finance, Fiscal Policy, Institutional Framework, Business Legislation and Societal Framework. As can be seen from table 4, Jordan ranked better than Israel in four of the five sub-factors; Public Finance, Fiscal Policy, Institutional Framework and Societal Framework. Thus also explaining why Jordan ranked better overall in terms of Government Efficiency as previously highlighted.

As can be seen from table 4, Jordan's rank in the Public Finance sub-factor is uncompetitive. By looking at the indicators composing this sub-factor in more detail it is evident that the central Government Budget is in deficit (-2.81% of GDP) attaining an uncompetitive rank of 19th place out of 24 economies within its population group. Moreover, Central Government Foreign Debt (75.767% of GDP) in 2001 is greater than that of Domestic Debt (22.3% of GDP) for the same year, which indicates that the government is mainly borrowing from foreign sources revealing that the financial market in Jordan is underdeveloped and domestic debt instruments in Jordan are either short or medium-term in addition to the fact that the responsiveness of the domestic market to such instruments is low. Nevertheless, the Central Government Total Debt (real growth) for that year is quite low reaching 0.02% (ranking 9th out of 23 economies) reflecting that the government is more or less in control of its budget. Note that Central Government Expenditure did not exceed 34.74% of GDP achieving a very competitive rank of 6th out of 25 economies.

In the second sub-factor; Fiscal Policy, Jordan achieved a very competitive rank overall (see table 4), preceding both Israel and Finland; the economy ranking first overall within this population group. This means that the fiscal policy applied in Jordan is not burdensome in comparison to the other economies within this population group as indicated by the collected total tax revenues as a percentage of GDP (15.91%), which is among the lowest thereby achieving the rank of 2nd place in this indicator.

When analyzing the Institutional Framework sub-factor in which Jordan achieved a rank (18th place) maintaining a lead over Israel, it is evident from the WCY results that this can be attributed to the central bank policy in Jordan bearing to some extent a positive impact on economic development as perceived by executive managers (19th place) in conjunction with the exchange rate policy in which Jordan ranked 5th. Finally, the exchange rate stability in Jordan led to the attainment of the following very competitive rank 2nd place. Additionally speaking, under the state efficacy segment Jordan ranked well in terms of the Government Economic Policies (7th place) indicating that government economic policies adapt quickly to changes in the economy. Also, under the government decision indicator Jordan ranked 16th, which means government decisions, are more or less effectively implemented. Considering the Transparency indicator, Jordan ranked 17th which portray satisfactory and somewhat transparent governmental policies. Additionally, Jordan ranked 17th in the public service indicator indicating that public service is to some extent independent from political interference. Finally, Jordan ranked 17th in the bureaucracy indicator, which demonstrates bureaucracy hinders business activity but to a certain extent.

When examining the Business Legislation sub-factor wherein Jordan achieved an uncompetitive rank (23rd place), Israel achieved a similar uncompetitive rank (21st place). Jordan's uncompetitive rank in this sub-factor mainly relates to openness and can be attributed to integration into regional trade blocks with a rank of 24th, which denotes that

integration does not provide enough access to foreign markets. Additionally, Jordan scored poorly in the Export Credit and Insurance indicator (25th place), which illustrates that export credits and insurance are not available at reasonable prices for companies. Lastly, Jordan's uncompetitive rank in this sub-factor is also due to the poor rank in the protectionism indicator (23rd place), which signifies that protectionism negatively affects the conduct of businesses in Jordan.

When exploring Business Legislation from the aspect of competition regulations, Jordan achieved the rank of 27th place in the Competition Legislation indicator, which means that it is not efficient in preventing unfair competition although it should be noted that competition legislation in Jordan has been adopted only recently. Additionally, according to the perceptions of executive managers in Jordan, the current Product and Service Legislation deters business activity as reflected in the rank of 23rd place. Similarly, Jordan achieved the rank of 23rd place in terms of Price Controls illustrating that they affect the pricing of products in most industries. Nevertheless, the Jordanian government achieved a competitive rank in the Government Subsidies indicator (6th place) indicating that government subsidies to private and public companies in Jordan as a percentage of GDP is low allowing companies to operate increasingly according to market forces.

Labor regulations are another part of the Business Legislation sub-factor, however most of Jordan's ranks in this segment are competitive such as the Labor Regulations indicator (10th place), which means labor regulations (hiring/firing practices, minimum wages, etc.) are flexible enough, and Unemployment Legislation (10th place), indicating that it provides an incentive to look for work. Yet, one indicator in need of improvement is mirrored in the Immigration Laws preventing companies from employing foreign labor, in which Jordan ranked 24th; also contributing to its uncompetitive overall rank in Business Legislation.

As for capital market regulations, it is clear from Jordan's results in this segment that it needs to be enhanced. To be specific, Jordan attained the rank of 25th place in the Legal Regulations of Financial Institutions indicators meaning that they are inadequate for financial stability. In addition, according to the survey results, the confidentiality of financial transactions is not guaranteed (27th place), and foreign financial institutions do not have access to the domestic market (25th place). Although Investment Incentives are considered fairly attractive to foreign investors (15th place), investments can be increased if they are further enhanced.

In terms of the final sub-factor; Societal Framework, as can be seen from table 4, Jordan (20th place) did significantly better than Israel preceding it by 6 places. Jordan's rank can be attributed to the perception that justice is somewhat fairly administered in society (19th place) and personal security and private property are adequately protected (9th place).

Nonetheless, the survey results indicate that the risk of political instability is very high (28th place). This can be attributed to the fact that the survey was distributed shortly before the war on Iraq, which had an effect on Jordan's results particularly in this indicator.

Furthermore, a huge gap exists between the percentage of household incomes going to the lowest 20% of households (7.6%) and that going to the highest 20% of households (44.4%). This shows that income distribution in Jordan is uneven whereby most incomes go to the highest 20% of households. In other words, the gap between the poor and the rich is getting wider.

3. Business Efficiency:

Table 5: Business Efficiency Sub-Factor ranks for Jordan, Israel and Finland, 2003

Competitiveness Sub-factors	Rank (Out of 29 Economies)		
	Finland	Jordan	Israel
- Productivity	12	29	25
- Labor Market	3	26	17
- Finance	2	25	20
- Management Practices	1	26	16
- Attitudes and Values	2	21	12

The Business Efficiency Factor consists of five main sub-factors; Productivity, Labor Market, Finance, Management Practices and Attitudes and Values. As can be seen from table 5, Jordan ranked worse than Israel in all of the five sub-factors. This explains why Jordan ranked 28th overall in terms of Business Efficiency as previously stated.

By Jordan ranking last in the Productivity sub-factor it prompts the greatest negative effect on Jordan's performance in terms of Business Efficiency. This is attributed to Jordan ranking last in the Overall Productivity indicator in conjunction with this indicator's real growth estimate, which demonstrates an overall declining productivity (-5.44%). This is further supported by Jordan's weak performance in the Labor Productivity indicator in which it also ranked last. Breaking productivity down according to sector, it is clear that productivity in Industry (28th place) is slightly higher than that of Agriculture and Services wherein both ranked last. It should be noted that the negative impact of low labor productivity particularly in the service sector, may be amplified since services maintain the highest contribution to Jordan's GDP.

Jordan's performance in the Labor Market sub-factor is better than the Productivity sub-factor yet its rank is still uncompetitive achieving 26th place. This uncompetitive rank is mainly due to worker motivation in the Jordanian economy being perceived by the business sector as very low (27th place). Furthermore, according to the survey results, employee training is not a high priority in companies (27th place), skilled labor is not readily available (21st place), brain drain (well-educated/ skilled people) is perceived to hinder competitiveness in the economy (25th place), and competent senior managers are not available (24th place). Moreover, it was previously stated that female participation in the economy is still low. This is further reflected in the percentage of females in the labor force (38.07%), for which Jordan ranked 26th out of 28 economies. Hence, it can be said that overall, the skills that meet the requirements of business are not readily available in Jordan, the effect of which is amplified given that foreign high-skilled people are not attracted by the business environment in Jordan as mirrored in the survey result of 26th place. Nonetheless, Jordan ranked 1st in terms of total hourly compensation for manufacturing workers including wages and supplementary benefits.

As previously stated, Jordan's performance in the Finance sub-factor is also uncompetitive. This can be mainly attributed to the low bank efficiency, low stock market efficiency and limited potential for self-financing. Examining each in more detail, banking efficiency in Jordan is reflected using the following indicators Credit, Investment Risk, Venture Capital, Banking Services and Banking Regulation. In terms of credit, Jordan ranked 22nd indicating executive managers believe that credit does not easily flow from banks to businesses. Jordan's rank in Investment Risk (29th place) reveals that Euromoney country credit-worthiness is low in Jordan's case (45.4 on a scale of 1-100, wherein investment risk is highest in countries scoring 1 and lowest in countries scoring 100); thus signifying a relatively high investment risk. Looking at Jordan's rank in the Venture Capital indicator (27th), executive managers believe that it is not easily available for business development. It is also believed that Banking Services are not widely developed in the Jordanian economy, thus attaining the rank of 27th place. Finally, banking regulation is thought to hinder competitiveness in the economy as the rank of 26th place reveals.

Jordan's stock market efficiency on the other hand is reflected in the following indicators Stock Market capitalization, Value Traded on Stock Markets, the Number of Listed Domestic Companies and Insider Trading. To begin with, stock markets are not believed to sufficiently provide adequate financing to companies as perceived by business executives in the Jordanian economy (19th place). In addition, Stock Market Capitalization in Jordan is low reaching US\$ 6.3 billion in 2001, which is ranked at 25th place. The value traded on stock markets in 2001 reached US\$ 180 per capita reflecting slow stock market activity (27th place), and 161 companies were listed in the same year, thus ranking 12th out of 24 economies. This shows that the Jordanian stock market is underdeveloped with limited participation by companies. Finally, Jordan's survey data rank (24th place) in terms of insider trading³ reveals that it is perceived to be common.

As for self-financing, executive managers believe that cash flow is generally insufficient to allow companies to self-finance. Hence, it is limited thereby restricting business activity in the economy.

In the fourth sub-factor; Management Practices, the results in this area disclose that overall, management needs to be developed. To elaborate, in terms of adaptability to market changes; it is low for companies in the Jordanian economy attaining 28th place. Ethical practices are not totally implemented in companies (20th place), the credibility of managers is not widely acknowledged in the economy (21st place), and social responsibility of business leaders is relatively low towards society (22nd place). Health, safety and environmental concerns are not widely addressed by management (25th place). Finally, entrepreneurship is not widespread in the economy (27th place), and marketing is not conducted efficiently by enterprises (29th place).

Jordan did best in the attitudes and values sub-factor in contrast to the previous four sub-factors ranking at 21st place. Yet, Israel still performs better overall in this area. This sub-factor was addressed through the survey, which reflects the perceptions and beliefs of business executives. For example, globalization is thought to be threatening to the Jordanian economy (27th place), thereby explaining why the attitudes toward it are generally negative (25th place). Business executives also believe the country/ economy image abroad hinders business development (22nd place). Furthermore, the flexibility and adaptability of people in the Jordanian economy is low when faced with new challenges (24th place) and the values of the society do not fully support competitiveness (21st place).

Nevertheless, the relocation of production and R&D outside the country is not perceived as a threat to the future of the Jordanian economy. This is reflected in the Relocation Threats of Production rank; 7th place, and the Relocation Threats of R&D Facilities rank; 6th place.

4. Infrastructure:

Table 6: Infrastructure Sub-Factor ranks for Jordan, Israel and Finland, 2003

Competitiveness Sub-factors	Rank (Out of 29 Economies)		
	Finland	Jordan	Israel
- Basic Infrastructure	11	29	28
- Technological Infrastructure	3	29	8
- Scientific Infrastructure	6	18	11
- Health and Environment	6	24	15
- Education	1	27	3

The Infrastructure Factor consists of five main sub-factors; Basic Infrastructure, Technological Infrastructure, Scientific Infrastructure, Health and Environment and Education.

³ Insider trading includes both legal and illegal conduct. The legal version is when corporate insiders—officers, directors, and employees—buy and sell stock in their own companies. Illegal insider trading refers to buying or selling a security, in breach of a fiduciary duty or other relationship of trust and confidence, while in possession of material, nonpublic information about the security.

As can be seen from table 6, Israel ranked better than Jordan in all of the five sub-factors. Note that Jordan ranked last in both basic and technological infrastructure. This explains why Jordan ranked 26th overall in terms of Infrastructure as previously stated.

Taking each sub-factor separately, basic infrastructure in Jordan is the poorest amongst its population group. This is reflected in the Urbanization, Population under 15 years, Dependency Ratio, Distribution Infrastructure, Energy Infrastructure and Electricity Cost for Industrial Clients indicators. Focusing on the Urbanization indicator, Jordan ranked poorly (24th place), which reveals that this trend drains economic resources. When considering the Population Under 15 indicator, a significant percentage of Jordan's population lies within this age range (39.6%), which is sufficient to signify a high dependency ratio wherein Jordan ranked 29th. The distribution infrastructure (roads, trains, planes, etc.) of goods and services is inefficient considering Jordan ranked 22nd in this indicator. Taking a more focused look at the Energy infrastructure, Jordan scored 21st revealing that the energy infrastructure is somewhat inadequate and insufficient for the economy thus in need of further improvement. Finally, under this sub-factor, Jordan ranked 15th in the Electricity Cost for Industrial Clients indicator indicating that Jordan's energy prices are somewhat uncompetitive compared to the participating economies in this population group.

When examining the Technological Infrastructure, again Jordan ranked last in this sub-factor. This is mainly due to the relatively low adequacy of communications in terms of availability, reliability and cost in Jordan as indicated by the rank of 22nd place. Furthermore, new information technology and its implementation do not meet business requirements as portrayed by the survey rank of 21st place. The hard data available in terms of the number of computers per capita and Internet users in Jordan are the lowest amongst its population group ranking 29th in both. Additionally, information technology skills are not readily available as indicated by the survey responses of executive managers whereby Jordan ranked 21st, and technological cooperation is lacking between companies thus, achieving 26th place. Nonetheless, low cooperation is not aided by the fact that funding for technological development is not generally sufficient as indicated by the rank of 22nd place. Finally, high-tech exports in 2001, as a percentage of manufactured exports constituted only 5.59%, which is comparatively low resulting in the rank of 24th place out of 27 economies.

Jordan ranked relatively well at 18th place in terms of Scientific Infrastructure and this is mainly due to the ranks Jordan achieved in Total R&D Personnel Nationwide (14th/26 economies), and Total R&D Personnel Nationwide per Capita (11th/26 economies). Furthermore, it is perceived from the survey results that science in schools is adequately taught (11th place) in conjunction with the fact that interest in science and technology is very strong among the youth (3rd place). Nevertheless, Jordan also attained the rank of 19th place in patent and copyrights protection indicating that it is not fully adequately enforced, science degrees as a percentage of total first university degrees in science and engineering for the year 1999 (20th/27 economies) was low in addition to the total expenditure on R&D as a percentage of GDP, which is also considered low whereby Jordan 28th.

Considering the Health and Environment sub-factor, Jordan ranked 24th. This uncompetitive rank is mainly attributed to low Public Expenditure on Health in the year 2000 (26th place), low healthy life expectancy wherein it ranked last, and the quality of life indicator in which Jordan ranked 27th reflecting a low quality of life in the Jordanian economy/society.

Nevertheless, Jordan ranked relatively well in the Total Health Expenditure as a percentage of GDP (7.98%) thereby obtaining the rank of 16th place. Furthermore, according to the survey results, pollution problems do not affect seriously the infrastructure of the economy (18th place).

When analyzing the Education sub-factor, the uncompetitive rank of 27th place is mainly due to the low-pupil-teacher ratio in both primary and secondary education ranking 27th and 28th respectively. Furthermore, secondary school enrollment in the year 2000 is not up to standards with only (75.87%) of relevant age group receiving fulltime education thus attaining a rank of 27th place. Illiteracy in 2000 was high amounting to (11%) of population

and ranking last in the population group. Finally, knowledge transfer in Jordan is perceived as lacking between companies and universities as indicated by the rank of 24th place.

IV. Conclusion:

To sum up, Jordan ranked last overall as a result of its uncompetitive performance in the four main competitive indicators revealing that its main weaknesses lie in the Economic Performance, Business Efficiency and Infrastructure indicators. Additionally, the impact of these weaknesses on Jordan's overall performance was further amplified as a result of the economies in its population group to which the comparison is being made, whereby all the economies are relatively bigger and more advanced than Jordan as previously indicated by their income status.

In order to improve the ranks achieved in these indicators, Jordan needs to focus on improving the macro-economic performance of the domestic economy since its past economic performance is weak and competition is not completely governed by market forces due to state intervention as well as not intense enough to improve the competitiveness of domestic firms. Furthermore, in spite of Jordan's increasing openness to the international market, international trade remains weak due to the fact that the private sector is not fully aware of the means in which it can benefit from the various trade agreements signed. This is not withstanding the fact that international investment in Jordan still hasn't reached the required level and export-led competitiveness has not been fully achieved due to the lack of focus on value-added exports from the part of the private sector.

Furthermore, Jordan's results in the Business Efficiency indicator show that the private sector is still not fully capable of taking a proactive role in the economy thus portraying the existence of a gap between the current role of the private sector and the desired future role. As a result, enterprises need to perform in a more innovative, profitable and responsible manner. This cannot be achieved unless maximum emphasis is placed on significantly improving the productivity of businesses to reflect value added. Additionally, the quality of the labor market needs to be improved whilst maintaining a strong and enthusiastic attitude towards work. Entrepreneurship should be encouraged and a well developed and internationally integrated financial sector which facilitates the provision of finance for business start-ups and development needs to be ensured. Another factor bearing great impact on business efficiency embodies management practices, which thus far are inefficient, do not meet international standards and are insufficiently flexible and inadaptable to changes in the economy.

In terms of Infrastructure, it is clear from the WCY results that it does not meet the needs of business in particular basic infrastructure, technological infrastructure and education. In this regard, adequate and accessible educational resources help develop a knowledge-driven economy. Furthermore, long-term investment in R&D is necessary in addition to investment in basic research and innovative activity. More work also needs to be done in the areas of health and environment to maintain an attractive quality of life. In brief, infrastructure overall, is still underdeveloped in Jordan and may affect international investors' decisions to invest in, or transfer their production operations to Jordan.

Nevertheless, Jordan did relatively well in the Government Efficiency indicator, indicating that it is working on minimizing state intervention and focusing on providing competitive conditions for enterprises in conjunction with providing macroeconomic stability and adequate social conditions. More importantly, the government is currently working on adapting its economic policies to the ever-changing international environment, and providing a suitable societal framework which promotes fairness, equality and justice while ensuring the security of the population. In other words, it is clear that Jordan has a competitive edge over its rival Israel in terms of Government Efficiency but should work on further enhancing it.

Finally, there is great room for improvement in Jordan's overall rank as indicated by the WCY through the **"What If?" Simulation** exercise, which shows how an economy's overall ranking would change if the scores it achieved in the 20 weakest criteria as identified in the

WCY are replaced with the average scores of the entire population group in the specified indicators. It should be noted that this process was only undergone for indicators over which the country in question or region has some control, as specified by the WCY.

In Jordan's case, the 20 weakest criteria (i.e. the criteria which had the greatest negative impact on Jordan's overall rank) identified by the WCY are all indicators over which Jordan has some control. These are shown in appendix 3.

Hence, it became evident by undergoing the above-described process on these criteria that Jordan's overall rank would improve from last (29th place) to 22nd place (i.e. improve by 7 places).

Appendix (1)
Economy size and income status of Population group II IMD economies

Economy	Population (Millions) 2002	GDP (Billions) 2002	GDP per capita PPP (US\$) 2002	Country Income Status*
Estonia	1.3	6.4	10,923	Medium
Iceland	0.3	8.5	29,019	High
Jordan	5.3	9.3	3,837	Low
Luxembourg	0.4	20.5	53,592	High
Slovenia	2	21	17,523	Medium
Slovak Republic	5.4	23.7	12,471	Medium
New Zealand	3.9	56.5	19,642	Medium
Chile	15.1	58.6	9,542	Medium
Hungary	10.2	62.8	12,792	Medium
Czech Republic	10.3	69.5	14,945	Medium
Singapore	4.2	87	23,023	High
Israel	6.6	102.5	18,879	Medium
Catalonia	6.5	112	24,465	High
Ireland	3.9	118.4	33,716	High
Portugal	10	120.5	18,220	Medium
Rhone-Alps	5.8	128.9	24,405	High
Finland	5.2	131.7	24,743	High
Greece	9.9	132.1	19,429	Medium
China Hong Kong	6.8	163	25,163	High
Denmark	5.4	172.4	29,458	High
Norway	4.5	191.7	29,748	High
Austria	8.1	202.5	26,967	High
Lombardy	9.1	219.9	31,568	High
Sweden	8.8	238.1	24,703	High
Belgium	10.3	246.7	25,697	High
Switzerland	7.2	267.7	28,057	High
Bavaria	12.3	347.7	29,672	High
Ile-De-France	11.1	403.3	36,639	High
Netherlands	16.1	418.8	27,123	High
<ul style="list-style-type: none"> - Low income countries are those with a GDP per capita of less than US\$ 6,500. - Middle income countries are those with a GDP per capita ranging from US\$ 6500 to 23,000. - High income countries are those with a GDP per capita that exceeds US\$23,000. 				

Appendix (2)
Jordan's strengths and weaknesses in the main Competitiveness Factors

Economic Performance	Strengths	Weaknesses
	Employment – growth	Employment, Percentage of population
	Exports of goods - real growth	GDP per capita (PPP)
	Real GDP Growth	GDP per capita US\$ per capita
	Exports of commercial services	Youth Unemployment Percentage Change of Labor force
	Real GDP Growth per capita	Unemployment Rate
	Consumer price inflation	Exports of commercial services
		Direct investment flows inward Percentage of GDP
		Exports of goods
		Direct investment flows inward US\$ billions
Government Efficiency	Collected total tax revenues	Country credit rating
	Effective personal income tax	Political Parties do not understand today's economic challenges (Survey)
	Exchange rate stability	Females in parliament
	The exchange rate policy of your economy supports the competitiveness of enterprises (Survey)	The risk of political instability is very high (Survey)
	Collected indirect tax revenues (goods and services)	Customs' authorities do not facilitate the efficient transit of goods (Survey)
	Government subsidies	Competition legislation in your economy is not efficient in preventing unfair competition (Survey)
	New legislation encourages the competitiveness of enterprises (Survey)	Confidentiality of financial transactions is not guaranteed (Survey)
	Average corporate tax rate on profit	Cross border ventures cannot be freely negotiated with foreign partners (Survey)
	Collected capital and property taxes	Access to foreign capital markets is restricted for domestic companies (Survey)
	Employee's social security contribution rate	Access to local capital markets is restricted for foreign companies (Survey)
Business Efficiency	Compensation levels	Labor force Percentage of population
	Labor Force Growth Percentage change	Investment Risk
	Working hours	Overall productivity - real growth
	Unit labor costs in the manufacturing sector	Marketing is not conducted efficiently by enterprises in your economy (Survey)
	Relocation of R&D facilities is not a threat to the future of your economy (Survey)	Overall productivity (PPP)
	Relocation of production outside the country is not a threat to the future of your economy (Survey)	Adaptability to market changes is low for companies in your economy (Survey)
	Banking sector assets Percentage of GDP	Banking services are not widely developed in your economy (Survey)
	Stock market index	Venture capital is not easily available for business development (Survey)
		Worker motivation is low in your economy (Survey)
		Employee training is not a high priority in companies (survey)

Infrastructure	Alcohol and drug abuse do not pose problems at the work place (Survey)	Human development index
	Interest in science and technology is strong among the youth (Survey)	Dependency ratio
	Environmental laws and compliance do not hinder the competitiveness of businesses (Survey)	Illiteracy
	Qualified engineers are available in your labor market (Survey)	International fixed telephone costs
	Science in schools is adequately taught (Survey)	Mobile telephone subscribers
	Total R&D personnel nationwide per capita	Life expectancy at birth
	Mobile telephone costs	Fixed telephone lines
	Electricity costs for industrial clients	Internet users
	Sustainable development is a priority in your economy (Survey)	Computers per capita
	The educational system meets the needs of a competitive economy (survey)	Total expenditure on R&D per capita

Appendix 3
Jordan's 20 Weakest Criteria

Jordan's 20 Weakest Criteria	Jordan's value	Jordan's rank	Average value
Youth unemployment (Percentage of Labor Force)	56	28	15.61
Human Development Index (Combines economic-social-educational indicators)	0.717	29	0.896
Dependency Ratio (Population under 15 and over 64 years old, divided by active population (15 to 64 years))	73.3	29	49.7
Illiteracy (Adult (over 15 years) illiteracy rate as a percentage of population)	11	29	2.4
Central government Foreign Debt (Percentage of GDP)	75.767	23	14.965
Labor force (percentage of population)	26.05	29	48.23
Employment (percentage of population)	22.56	29	45.06
Investment risk (Euromoney country credit-worthiness scale from 0-100)	45	29	84
Country credit rating (rating on a scale of 0-100 assessed by the institutional investor magazine ranking)	38.7	29	79.7
Life expectancy at birth (average estimates)	70.8	29	77.4
Internet Users (Number of internet users per 1000 people)	56.3	29	384.5
Unemployment Rate (Percentage of Labor force)	14.9	28	6.71
Overall Productivity (PPP)	16,672	29	51,194
Marketing (marketing is not conducted efficiently by enterprises in your economy)	4.72	29	6.35
Political Parties (Political parties do not understand today's economic challenges)	2.36	29	4.69
Risk of Political Instability (The risk of political instability is very high)	5.8	28	7.93
Quality of life (Quality of life in your economy/society is low)	4.97	27	7.38
Customs' Authorities (Customs' authorities do not facilitate the efficient transit of goods)	5.6	28	7.1
Banking Services (Banking services are not widely developed in your economy)	6.53	27	8.02
Competition Legislation (Competition legislation in your economy is not preventing unfair competition)	4.57	27	6.04