

# IS THERE A NEW VISION FOR MAGHREB ECONOMIC INTEGRATION?

VOLUME II: ANNEX  
(IN TWO VOLUMES)



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SOCIAL AND ECONOMIC DEVELOPMENT GROUP  
MIDDLE EAST AND NORTH AFRICA  
THE WORLD BANK

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**(In Two Volumes) Volume II: Annex**

**November 2006**

Social and Economic Development Group  
Middle East and North Africa Region  
The World Bank



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# TECHNICAL ANNEX

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## A. TRADE INDICES<sup>1</sup>

### 1. Trade Intensity Index

The *trade intensity index* is defined as the share of one country's exports going to a partner divided by the share of world exports going to the partner.

$$I_{ijt} = \frac{X_{ijt}}{X_{it}} / \frac{M_{jt}}{M_{wt}}$$

where  $X_{ijt}$  is country  $i$ 's exports to country  $j$  in period  $t$ ,  $X_{it}$  is  $i$ 's total exports in period  $t$ ,  $M_{jt}$  is  $j$ 's total imports in period  $t$ , and  $M_{wt}$  is the sum of world imports in period  $t$ . If the trade intensity index (TII) value is above or below unity, the countries have greater or smaller bilateral trade flows than would be expected based on the two partners' share in world trade. For those trading partners that have TIIs greater than unity, their trade relationship can be defined as 'intensive' (that is, the countries trade more than would be expected given the relative size of the market for imports). An analysis of the changes in TII over time can show whether two countries are experiencing an increased or decreased tendency to trade with one another.

### 2. Product Diversification Index

Export diversification is held to be important for developing countries because many developing countries are often highly dependent on relatively few primary commodities for their export earnings. Unstable prices for these commodities may subject a developing country exporter to serious terms of trade shocks. Since the covariation in individual commodity prices is less than perfect, diversification into new primary export products is generally viewed as a positive development. The strongest positive effects are normally associated with diversification into manufactured goods, and its benefits include higher and more stable export earnings, job creation and learning effects, and the development of new skills and infrastructure that would facilitate the development of even newer export products.

The *product diversification index* for country  $j$  is defined as:

$$D_{ij} = \left[ \sum |h_{ij} - h_i| \right] / 2$$

Where  $h_{ij}$  is the share of commodity  $i$  in the total exports of country  $j$  and  $h_i$  is the share of the commodity in world exports. This index would illustrate that a country with equal share in every 3-digit product (complete diversification) has more concentrated exports than another whose profile match the (concentrated) structure of world trade.

### 3. Product Concentration Index

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<sup>1</sup> The methodology for the computation of trade indices draws on Hoekman, et al (2003) and Yeats and Ng (2003).

A measure related to the product diversification index used by UNCTAD is the concentration index or **Hirschman index** which is calculated using the shares of all 3-digit products in a country's exports: The index for country  $j$  is defined as:

$$H_j = \sqrt{\sum (x_i / X)^2}$$

Where  $x_i$  is country  $j$ 's export of 3-digit product and  $X$  is country  $j$ 's total exports. The lower the index the less concentrated are a country's exports.

#### 4. Market Concentration Index

The **market concentration index** which measures the concentration of a country's exports bundle is defined as:

$$L = \log \frac{\sum X_i}{n} - \frac{\sum \log X_i}{n}$$

where  $X_i$  is the total merchandise exports to country  $i$ , and  $n$  is the total number of markets. The higher the index, the higher the degree of concentration. If the same amount is exported to all markets, then  $L = 0$ .

#### 5. Trade Complementarity Index

The **trade complementarity index** can provide useful information on prospects for intraregional trade in that it shows how well the structures of a country's imports and export match. It also has the attraction that its values for countries considering the formation of a regional trade arrangement can be compared with other that have formed or tried to form similar arrangements.

The index of trade complementarity between countries  $k$  and  $j$  ( $C_{ij}$ ) is defined as:

$$C_{ij} = 100 - \sum (|m_{ik} - x_{ij}| / 2)$$

Where  $x_{ij}$  is the share of good  $i$  in the global exports of country  $j$  and  $m_{ik}$  is the share of good  $i$  in all imports of country  $k$ . The index is zero when no goods exported by one country is imported by the other, and 100 when the export-import shares exactly match.

## 6. Revealed Comparative Advantage (RCA) index

Measures of *revealed comparative advantage (RCA)* have been used to help assess a country's export potential. The RCA indicates whether a country is in the process of extending the products in which it has a trade potential, as opposed to situations in which the number of products that can be competitively exported is static. It can also provide useful information about potential trade prospects with new partners. Countries with similar RCA profiles, such as those in Africa, are unlikely to have high bilateral trade intensities unless intraindustry trade is involved. RCA measures, if estimated at high levels of product disaggregation, can focus attention on other nontraditional products that might be successfully exported.

The RCA index is defined as:

$$RCA_{ij} = (x_{ij} / X_{ij}) / (X_{jw} / X_{tw}),$$

Where  $x_{ij}$  is the value of country  $i$ 's exports of  $j$ , and  $X_{ij}$  is the country's total exports while  $X_{jw}$  is world exports of  $j$  and  $X_{tw}$  is total world exports.

If the RCA value is less than unity (which indicates that the share of a particular product in a country's exports is less than the corresponding world trade share) implies that the country has a revealed comparative disadvantage in the product. Similarly, if the index exceeds unity, the country has a revealed comparative advantage in the item. Interpretation of RCA profiles should be read with care.

The *export specialization (ES) index* is a slightly modified RCA index in which the denominator is usually measured by specific markets or partners. It provides product information on revealed specialization in the export sector of a country and is calculated as the ratio of the share of a product in a country's total exports to the share of this product in imports to specific markets or partners rather than its share in world exports.

## 7. Intra-Industry Trade (Grubel-Lloyd) Index

Some analyses of factors influencing the success or failure of efforts to promote industrialization and growth conclude that a growing level of intraindustry trade (IIT) plays an important positive role. Intraindustry exchange produces extra gains from international trade over and above those associated with comparative advantage because it allows a country to take advantage of larger markets. By engaging IIT, a country can simultaneously reduce the number of similar products it produces while increasing the variety of goods available to domestic consumers. The IIT index ranges between zero and one, with larger values indicating a greater level of trade between firms in the same industry. Higher IIT ratios suggest that net gains from specialization in different products are being exploited and that the participating country is increasing its integration into the world economy.

The intra-industry trade index (also known as the Grubel-Lloyd index) measures the magnitude of intra-industry flows in total manufacturing trade. The index is defined as:

$$IIT = 1 - \sum [X_{ijk} - M_{ijk}] / \sum (X_{ijk} + M_{ijk}),$$

where  $X_{ijk}$  represents the exports of products from industry  $i$  from country  $j$  to country  $k$  and  $M_{ijk}$  represents the imports of products from industry  $i$  by country  $j$  from country  $k$ . The analysis is generally confined to manufactured goods, i.e. items classified in SITC groups 5 through 8 less nonferrous metals.

## 8. Export Demand Decomposition

The influence of demand for a specific product can be measured by the change in the total (global) value of regional imports of the item. In calculating the influence of this factor, one assumes that a given country maintains its regional trade share for the commodity. Specifically, if  $D_{0,j}$  and  $D_{t,j}$  represent regional trade in product  $j$ , at time period 0 and  $t$  respectively, the change in a specific country's exports attributed solely to demand  $\Delta E_{d,i}$ :

$$\Delta E_{d,i} = \sum s_{0,j} \times (D_{t,j} - D_{0,j})$$

where  $s_{0,j}$  is the share of country  $i$  in regional imports of product  $j$  (defined at the four-digit level of the Revision 2 SITC) from all countries in the base period 0, and the summation is over all goods traded. Therefore, the above equation shows the change in country  $i$ 's exports that would have occurred if only changes in demand took place. This index indicates how rapidly a country's recent exports would grow relative to regional or world trade if the country just maintained its current market for these products. This approach isolates the influence of change in regional or global demand for specific goods from any changes in the country's market shares or from diversification into new product lines.

Aside from the influence of global demand changes, there are other factors that can influence changes in the level and growth of a country's exports. One of these is change in a country's market shares for the goods it exports. In some cases improvements in market shares can offset relatively sluggish demand for a product, whereas the erosion of shares can make a bad situation worse. The influence of market share changes (CD) on exports can be estimated using a procedure analogous to that used for quantification of demand effects. This competitive effects measure for country  $i$  is measured by the difference between the exports that would have occurred if the country's market share had not changed, and those regional exports that were in fact realized. This competitive factor ( $\Delta E_{c,i}$ ) is:

$$\Delta E_{c,i} = \sum (s_{t,j} - s_{0,j}) D_{0,j}$$

where  $s_{t,j}$  is the share of the country in regional imports of the product in period  $t$ , and the summation is over all goods imported. The index indicates the dollar value of export gains or losses associated with a country's market share changes. Summing over all traditional products will indicate whether the country's competitive position improved or worsened and what was the magnitude of the associated change in the value of exports.

## B. GRAVITY PANEL MODELS FOR TRADE AND INVESTMENT

### Gravity Trade Model

The reduced form gravity trade model adapted from Adams et. al. (2003) is:

$$\begin{aligned} LnY_{ijt}^* = & \alpha + \alpha_i + \gamma_j + \lambda_t + \beta_1 LnSGDP_{ijt} + \beta_2 LnRLFA_{ijt} + \beta_3 LnSimilar_{ijt} + \beta_4 LnDis_{ij} \\ & + \beta_5 LnRER_{ijt} + \beta_6 LnTAR_{ijt} + \beta_7 Lin_{ij} + \beta_8 Bor_{ij} + \beta_9 Col_{ij} + \beta_{10} Cur_{ij} + \beta_{11} Is_i + \beta_{12} Is_j \\ & + \beta_{13} lock_i + \beta_{14} lock_j + \beta_{15} 3wave_{ij} + \sum_{ij} MRTA_{ij} + \sum_{-j} MRTA_{i-j} + \sum_{-i} MRTA_{j-i} + \varepsilon_{ijt} \end{aligned}$$

where:

$Ln$	is natural logarithmic transformation;
$Y_{ijt}^*$	is the value of exports from country $i$ to country $j$ in year $t$ ;
$\alpha_i$	is unobserved specific effects in exporting country $i$ ;
$\gamma_j$	is unobserved specific effects in importing country $j$ ;
$\lambda_t$	is unobserved specific effects in time period $t$ ;
$SGDP_{ijt}$	is the sum of bilateral GDPs of $i$ and $j$ in year $t$ ;
$RLFA_{ijt}$	is the absolute difference in GDP per capita of $i$ and $j$ in year $t$ ;
$Similar_{ijt}$	is similarity in country size between $i$ and $j$ in year $t$ in terms of aggregate GDP;
$Dis_{ij}$	is distance between the two largest or capital cities of countries $i$ and $j$ ;
$RER_{ijt}$	is the bilateral real exchange rate between $i$ and $j$ in year $t$ ;
$TAR_{ijt}$	is an average tariff rate in importing country $j$ on goods from country $i$ in year $t$ ;
$Lin_{ij}$	is a measure of linguistic similarity between $i$ and $j$ ;
$Bor_{ij}$	is a dummy that takes a value 1 if $i$ and $j$ share a land border and 0 otherwise;
$Col_{ij}$	is a dummy that takes a value 1 if $i$ and $j$ have colonial linkages and 0 otherwise;
$Cur_{ij}$	is a dummy that takes a value 1 if $i$ and $j$ have the same currency and 0 otherwise;
$Is_i$	is a dummy that takes a value 1 when $i$ is an island nation and 0 otherwise;
$Lock_i$	is a dummy that takes a value 1 when $i$ is a landlocked nation and 0 otherwise;
$3wave_{ij}$	is an index capturing third wave or service provisions of PTA that takes the value of the non-merchandise MLI if $i$ and $j$ are members of a specific PTA, 0 otherwise;
$MRTA\_B_t$	is an index capturing trade provision of a PTA that takes a value of the merchandise MLI if both countries $i$ and $j$ are members of a PTA, 0 otherwise;



$MRTA\_E_t$  is an index capturing trade provision of a PTA that takes the value of the merchandise MLI when the exporting country,  $i$  belongs to a PTA, 0 otherwise;  
 $MRTA\_M_t$  is an index capturing trade provision of a PTA that takes the value of the merchandise MLI when importing country,  $j$  belongs to a PTA, 0 otherwise;  
 $\varepsilon_{ijt}$  is an error term.

Adams et. al (2003) created two sub-indices to quantify the breath of coverage of Preferential Trading Agreements in the areas of agriculture and industrial production – the merchandise Member Liberalization Index (MLI) and the non-merchandise MLI, covering ‘third wave’ issues, including service provisions, plus general measures covering all trade. Services provision include provisions governing market access and national treatment in services and general measures cover national treatment provisions, investment rules, domestic competition policy, government procurement, intellectual property rights, and general provision covering the temporary and permanent movement of people. The scores for the indices are based on the text of the agreement and not on whether or how the provisions are used. A high index for non-merchandise trade indicates that a PTA is more liberal to members in its services trade, investment and related provisions. Using the methodological notes in Adams et. al (2003), a merchandise and non merchandise MLI was created for GAFTA. Other arrangements involving Maghreb countries took on a dummy value in the period where they were members. This only alters the relative magnitude of the MRTA coefficients and leaves its signs unaffected.

In carry out the gravity trade regression all observations between 1980 and 2004 that had MENA countries either as exporters or imports were retained in addition to other bilateral country pairs which had at least 50 percent of exports values taking a non-zero value. This choice was made to reduce the size of the dataset which exceeded 700,000 variables in its original form.

## Data Sources:

*Dependent variables.* Bilateral export data between 1980 and 2004 was obtained from WITS database while FDI stock levels was obtained from OECD Statistics and printed issues of UNCTAD's World Investment Report (WIR). Stock levels for Tunisia was constructed using flow data from WIR in conjunction with an estimate of stock levels in 1990 by distributing the total inward FDI among source countries based on their shares of flow data.

*Explanatory variables* were sourced from World Bank's World Development Indicators database (WDI). The remaining data were sourced from similar gravity model studies. The details are as follows:

The GDP data measure gross domestic product at purchasing power parity (PPP). GDP data were sourced from the World Bank's World Development Indicators (WDI 2005). GDP per capita was calculated by dividing GDP in PPP terms by population for each economy.

Population data were sourced from the WDI 2005. Population is measured as the mid-year population and counts all residents of an economy regardless of legal status or citizenship.

The primary source of the distance data, linguistic similarity, contiguity, colonial linkages was from CEPII<sup>2</sup> (2004). Distance between the two largest cities in measured in kilometres and is the great circle distance or 'as the crow flies'. The variable measures the degree of commonality in the languages is based on the fact that two countries share a common official language. The measure of colonization indicates that two countries had a colonial relationship. Data for currency links were sourced from Frankel and Rose (2000). A dummy variable with a value one when the two countries share a currency, and zero otherwise.

The data for the island and landlocked variables were taken from Wikipedia and CEPII (2004) respectively. Two dummy variables were formed, one with a value one where an economy is an island and zero otherwise, the other with a value of one when the economy is landlocked and zero otherwise.

Exchange rate data were sourced from WDI (2005). The exchange rate is measured as the period average exchange rate — the number of local currency units that can be traded for one US dollar. A bilateral exchange rate (the value of a unit of the exporter's currency in terms of the importer's currency) was calculated by dividing the importer's \$US exchange rate by the exporter's \$US exchange rate.

The tariff data were sourced from the WITS database. The variable is measured as the weighted average tariff rate — total value divided by the number of tariff lines and weighted by trading partners.

The Member Liberalisation Index (MLI) measures the extent of liberalisation within a PTA. The value of the MLI for a bilateral trade flow depends on whether the two economies are members of the same PTA. Following Adams et. al (2003), a variable was formed that allocates the score from the MLI where the two economies are members of the same PTA and in all other cases allocates a score of zero. When the two economies have more than one PTA in common, an a priori judgment was made as to which PTA was more likely to dictate the trading conditions between the two countries.

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<sup>2</sup> Centre d'Etudes Prospectives et d'Informations Internationales

**Table B.1.1: Gravity Model of Trade, Dynamic Fixed Effects (1980-2004)**

(E (exporter is a member), M (importer is a member) and B (both are members)).

Variable name	without tariff	with tariff
ln Sum of country pair GDP	2.31 (0.06) ***	0.30 (0.15) **
Similarity in country pair GDP	1.33 (0.03) ***	0.31 (0.08) ***
Ln of absolute difference in per-capita GDPs of country pair	-0.04 (0.00) ***	-0.05 (0.01) ***
Ln distance (km)	-1.45 (0.01) ***	-1.48 (0.01) ***
Ln bilateral exchange rate	0.04 (0.00) ***	0.09 (0.01) ***
Ln import tariffs	0.00 0.00	-0.25 (0.01) ***
Common language	0.71 (0.02) ***	0.61 (0.03) ***
Colonial	-0.04 (0.04)	0.17 (0.06) ***
Border	0.88 (0.04) ***	0.42 (0.08) ***
Currency union	1.03 (0.09) ***	1.36 (0.18) ***
Exporting country is an island	2.84 (0.23) ***	-0.42 (0.72)
Importing country is an island	0.51 (0.30) *	-0.31 (1.04)
Exporting country is landlocked	3.10 (0.19) ***	-0.30 (0.41)
Importing country is landlocked	0.94 (0.22) ***	4.34 (0.96) ***
3rd wave provision for all PTAs	0.14 (1.96)	15.46 (3.11) ***
pacraE		
pacraM		
pacraB	-3.75 (1.96) *	-3.29 (2.82)
anzcertaE	-0.65 (0.40) *	
anzcertaM	-0.58 (0.38)	
anzcertaB	-3.20 (1.59) **	-11.65 (2.22) ***
usa-israelE	-1.76 (0.53) ***	
usa-israelM	-0.67 (0.50)	
usa-israelB	16.64 (2.49) ***	3.10 (2.79)
chile-mexicoE	0.54 (0.41)	-0.49 (0.50)
chile-mexicoM	0.43 (0.37)	1.15 (0.38) ***
chile-mexicoB	0.09 (3.18)	-6.46 (3.18) **
chile-colombiaE	0.52 (0.44)	-1.52 (0.99)
chile-colombiaM	1.87 (0.42) ***	-1.83 (0.82) **
chile-colombiaB	0.28 (2.86)	-4.90 (2.82) *
new zealand -singaporeE	-1.17 (0.24) ***	-0.37 (0.27)
new zealand -singaporeM	-0.67 (0.23) ***	-0.15 (0.32)
new zealand -singaporeB	-0.88 (2.28)	-7.54 (3.10) **
ecE		
ecM		
ecB	-1.05 (1.40)	-2.96 (2.17)
eftaE		
eftaM		
eftaB	11.04 (3.69) ***	10.42 (3.98) ***
andeanE	-2.82 (0.49) ***	0.69 (1.27)
andeanM	-3.48 (0.46) ***	
andeanB	2.39 (0.80) ***	
laiaE	1.80 (1.08) *	
laiaM	-2.65 (1.05) **	
laiaB	13.46 (0.76) ***	10.09 (1.11) ***
spartecaE	-0.26 (1.09)	
spartecaM	1.16 (1.11)	
spartecaB	9.39 (0.82) ***	10.20 (1.44) ***
mercosurE	1.53 (0.35) ***	1.02 (0.74)
mercosurM	1.74 (0.35) ***	-5.84 (0.63) ***
mercosurB	1.44 (1.53)	-4.04 (1.65) **

**Table B.1.1: (continued)**

Variable name	without tariff	with tariff
naftaE	0.12 (0.35)	0.51 (0.67)
naftaM	0.40 (0.31)	-1.53 (0.40) ***
naftaB		-14.24 (3.03) ***
chile-mercosurE	0.12 (0.20)	0.48 (0.29) *
chile-mercosurM	-0.86 (0.20) ***	-1.62 (0.23) ***
chile-mercosurB	-3.15 (0.84) ***	-4.20 (0.83) ***
aftaE	2.53 (0.28) ***	2.88 (0.63) ***
aftaM	0.54 (0.28) *	-2.07 (0.47) ***
aftaB	-5.54 (1.09) ***	-12.17 (1.41) ***
ec-polandE	-0.76 (1.04)	-1.67 (1.89)
ec-polandM	8.69 (1.02) ***	5.16 (1.36) ***
ec-polandB	-5.84 (1.63) ***	-15.74 (2.44) ***
apecE	-0.10 (0.04) ***	0.26 (0.09) ***
apecM	0.42 (0.03) ***	0.01 (0.10)
apecB	-0.13 (0.06) **	-0.12 (0.06) **
comesaE	0.02 (0.04)	-0.01 (0.08)
comesaM	0.95 (0.04) ***	3.12 (0.60) ***
comesaB	0.21 (1.96)	-14.90 (3.11) ***
gaftaE	-0.77 (0.28) ***	-0.14 (0.47)
gaftaM	-5.56 (0.28) ***	-11.27 (0.64) ***
gaftaB	13.73 (0.76) ***	9.55 (0.88) ***
gccE	0.00 (0.11)	2.04 (0.34) ***
gccM	-1.15 (0.11) ***	3.80 (0.48) ***
gccB	0.72 (0.14) ***	0.01 (0.27)
usa_jordanE	-0.25 (0.13) **	-0.39 (0.15) ***
usa_jordanM	-0.17 (0.11)	0.12 (0.12)
usa_jordanB	2.39 (0.95) **	2.15 (0.88) **
ec-egyptE		
ec-egyptM		
ec-egyptB	5.04 (1.22) ***	-3.95 (2.09) *
ec_tunisia	0.09 (0.10)	0.22 (0.17)
ec_tunisiaM	0.13 (0.10)	0.52 (0.13) ***
ec_tunisiaB	0.81 (0.19) ***	0.31 (0.24)
ec_jordanE	0.63 (0.36) *	-0.60 (0.42)
ec_jordanM	0.24 (0.33)	-5.71 (0.52) ***
ec_jordanB	0.85 (0.30) ***	0.58 (0.36) *
ec_moroccoE	0.09 (0.32)	0.21 (0.34)
ec_moroccoM	0.33 (0.28)	0.57 (0.27) **
ec_moroccoB	-0.78 (0.25) ***	-0.49 (0.29) *
ec_algeriaE	-0.66 (0.38) *	1.16 (0.25) ***
ec_algeriaM	-2.12 (0.36) ***	8.77 (0.83) ***
ec_algeriaB	0.58 (0.11) ***	-0.19 (0.19)
efta_moroccoE	0.39 (0.30)	-0.18 (0.34)
efta_moroccoM	0.41 (0.27)	0.28 (0.27)
efta_moroccoB	-0.87 (0.45) *	-0.73 (0.46)
efta_jordanE	-0.38 (0.31)	0.85 (0.43) **
efta_jordanM	0.22 (0.28)	5.78 (0.52) ***
efta_jordanB	-1.68 (0.64) ***	-1.86 (0.69) ***
R-squared (adjusted)	0.69	0.65

## Notes:

1. Dependent variable is Ln (1+exports). Unbalanced panel covering 1980 to 2004.
2. Fixed effects coefficients associated with exporting country, import country and years are not reported.
3. \*\*\*, \*\*, \* denotes significance at the 1%, 5% and 10% level.

## Gravity FDI Model

The gravity FDI model uses a similar specification to the gravity trade model described earlier. The dependent variable is instead bilateral FDI stock in the host or importing country from the exporting country (source) between 1990 and 2002. FDI data was sourced from OECD STAT database and constructed from World Investment Reports published by UNCTAD. The results are used to predict FDI potential and contrasted them against actual stock levels in the Maghreb countries.

**Table B.1.2: Gravity Model of Investment, Dynamic Fixed Effects (1980-2004)**

Variable name			
In Sum of country pair GDP	0.52	(0.32)	*
Similarity in country pair GDP	0.51	(0.17)	***
Ln of absolute difference in per-capita GDPs of country pair	-0.32	(0.03)	***
Ln distance (km)	-1.03	(0.05)	***
Ln bilateral exchange rate	0.25	(0.02)	***
Common language	0.84	(0.13)	***
Colonial	0.41	(0.15)	***
Border	0.11	(0.15)	
Currency union	-4.42	(1.23)	***
Exporting country is an island	-10.35	(0.90)	***
Importing country is an island	-3.87	(0.67)	***
Exporting country is landlocked	-1.25	(0.94)	
Importing country is landlocked	-0.68	(0.55)	
gafteE	5.92	(3.43)	*
gafteM	-8.34	(1.72)	***
gafteB			
gccE	-1.72	(0.62)	***
gccM	1.01	(0.60)	*
gccB			
usa_jordanE	-1.92	(0.16)	***
usa_jordanM	0.79	(0.75)	
usa_jordanB			
ec_egyptE			
ec_egyptM			
ec_egyptB	-5.80	(2.99)	*
ec_tunisia	0.23	(0.81)	
ec_tunisiaM	2.03	(0.42)	***
ec_tunisiaB	-0.09	(0.44)	
ec_jordanE	2.20	(0.67)	***
ec_jordanM	0.84	(1.13)	
ec_jordanB	1.73	(0.96)	*
ec_moroccoE	4.51	(1.66)	***
ec_moroccoM	-1.24	(0.43)	***
ec_moroccoB	1.34	(0.45)	***
ec_algeriaE	-8.64	(1.03)	***
ec_algeriaM	-3.55	(0.68)	***
ec_algeriaB	-1.24	(0.41)	***
efta_moroccoE			
efta_moroccoM	2.79	(0.49)	***
efta_moroccoB	0.85	(0.33)	***
efta_jordanE	-1.45	(0.22)	***
efta_jordanM	-2.94	(0.58)	***
efta_jordanB	-0.75	(0.40)	**
R-squared (adjusted)		0.66	
No of observations		23844	

Notes:

1. Dependent variable is Ln (1+stock of outward investments). Unbalanced panel covering 1980 to 2004.
2. Fixed effects coefficients associated with exporting country, import country, years and PTA dummies for non-MENA countries are not reported.
3. Standard errors are corrected for heteroskedasticity. \*\*\*, \*\*, \* denotes significance at the 1%, 5% and 10% level.

### C. IMPACT OF MAGHREB RTA ON FDI

This section tries to answer the following questions: would a bigger market size of a Maghreb RTA influence the FDI received by the three participating countries? Do progress on key policy areas (such as education and financial stability) matter for the net impact of FDI?

To determine if the Maghreb countries would benefit in terms of FDI if a regional market is created, an empirical model is estimated based on the work by Jaumotte (2004) who focused on the experience of regional trade agreements (RTAs) involving only developing countries between 1980 and 1999. The dataset used for this work ranges extend the period observed to 2004 covering 80 countries<sup>3</sup>. The determinants of the econometric model include the following factors<sup>4</sup>:

1. **Size of host market.** In addition to including the size of the domestic market proxied by real GDP, the model includes an alternative measure of market size which takes the value of the regional market size for countries belonging to a RTA and the value of the domestic size for stand-alone countries. The regional market size is the sum of the domestic market size and of the market size of all countries sharing an RTA with the country considered. Real GDP data is from the World Bank's World Development Indicators, (WDI) 2004.
2. **Agglomeration effects.** There may be incentives to locate new FDI close to existing FDI due to linkages between projects, availability of support services or favorable national conditions signaled by the presence of other firms. This is captured using lagged value of the FDI stock which can also be interpreted as the rate at which the stock of FDI adjusts to its optimal level. Quality of infrastructure is another agglomeration variable which is proxied using the number of television sets per capita as reported in the WDI. This variable is found not to be statistically significant in Jaumotte's (2004) analysis which is also the case in the empirical work in this study.
3. **Labor cost and quality.** Some FDI in developing countries are motivated by low labor cost while others are drawn by the quality of labor. The model includes the average schooling years for the population over the age of 15 from Barro and Lee (2000) as a proxy for labor quality and to some extent as an inverse proxy for labor cost.
4. **Business/investment climate.** The climate for business/investment affects the cost of doing business in a foreign country. This work follows Jaumotte (2004) in using the financial risk index constructed by the Political Risk Services Group. It measures the current account and foreign debt position, net liquidity and exchange rate stability.
5. **Openness.** Trade openness can affect FDI in a variety of ways. Lower import barriers can reduce tariff-jumping FDI but may increase vertical FDI by facilitating the imports of inputs and machinery. Lower export barriers attract vertical FDI by facilitating the re-exports of processed goods and horizontal FDI by expanding the market size. Openness is measured using the export to GDP ratio and corrected for population and country size, with data taken from the WDI.
6. **Locational advantage.** In addition to the above variables, measures that quantify the gap between the domestic and RTA education levels financial stability and infrastructure are also included. These measures aim at assessing the locational advantage of a country relative to other countries which it shares an RTA with. The higher the education level, financial

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<sup>3</sup> See annex for the RTA's covered in this work.

<sup>4</sup> For a more detailed discussion of the model including the data source, please refer to Jaumotte (2004).

stability and infrastructure quality in a country compared to other partner countries which it shares an RTA, the higher its locational advantage for FDI within the RTA.

In its most complete form the empirical model takes the following form:

$$\begin{aligned} \ln FDI_{i,t+1} = & \lambda \ln FDI_{it} + \alpha_1 \ln Y_{it} + \alpha_2 \ln REGY_{it} + \beta_1 g_{Yit} + \beta_2 REGg_{Y,it} \\ & + \gamma_1 \ln educ_{it} + \gamma_2 \ln GAPeduc_{it} + \delta_1 \ln fin_{it} + \delta_2 \ln GAPfin_{it} + \phi_1 \ln tv_{it} + \phi_2 \ln GAPtv_{it} \\ & + \theta res(X/GDP)_{it} + \mu_i + \omega_{t+1} + \varepsilon_{i,t+1} \end{aligned}$$

Where  $FDI$  denotes the stock of FDI (in 2000 US dollars) in country  $i$ ,  $Y$  denotes real GDP (in 2000 US dollars),  $REGY$  denotes market size extended to include RTA market size for countries belonging to a RTA,  $g_y$  denotes real GDP growth,  $REGg_y$  denotes the average real growth rate in an RTA to which the country belongs,  $educ$  denotes the average years of education of people over 15,  $fin$  is the financial risk index of the Political Risk Services Group,  $tv$  is the number of television per-capita,  $res(X/GDP)$  is the measure of trade openness, the prefix  $GAP$  denotes the ratio between the domestic value of the variable and the average value for all countries sharing an RTA which country  $i$ ,  $\mu$  denotes the country's fixed effects and  $\omega$  the time effect. In order to minimize endogeneity concerns and account for the slow adjustment of the FDI stock, the model uses lagged values of the explanatory variables. Real GDP growth for a country and the RTA's average, refers to growth between  $t - 1$  and  $t$ .

The sample covers 80 developing countries during the period 1980-2004. In order to focus on the medium-term, the time interval consider in five years and the sample period is divided into 5 sub-periods, 1980-84, 1985-89, 1990-94, 1995-1999 and 2000-2004. The regression relates the end-of-period FDI stock (e.g. 1985) to the beginning of period values of the explanatory variables (e.g. 1980).

**Table B.1.3: Regional Model of the level of FDI stock**

Dependent variables : log (FDI <sub>t+1</sub> )	Coefficients	Std. Error
log FDI	0.40	(0.02) ***
log Y	0.03	(0.07)
log REGY	0.09	(0.03) ***
g <sub>y</sub>	0.53	(0.48)
REG g <sub>y</sub>	1.40	(0.78) *
log (educ)	0.02	(0.15)
log (GAPeduc)	0.49	(0.22) **
log (finance)	0.19	(0.11) *
log (GAPfin)	-0.04	(0.14)
residual (Exports/GDP)	0.15	(0.04) ***
year 1985	0.25	(0.05) ***
year 1990	0.58	(0.05) ***
year 1995	0.91	(0.07) ***
year 2000	0.94	(0.08) ***
Observations	332	
Number of countries	80	

- Note: 1. Regression utilized a feasible GLS with correction for panel-heteroskedasticity.  
 2. \*\*\*, \*\* and \* denotes significance at 1%,5% and 10% respectively.  
 3. Regression include country fixed effects and log(tv) and log GAPtv.

Table B.1.5 provides for each country in the Maghreb, estimates of the growth in FDI stock that would result from the creation of a regional market. The simulation uses estimated elasticities from the empirical model in Table B.1.4 and is based on 2004 data. The increase in market size due to a regional trade agreement would lead to an estimated increase in each country's FDI stock varying from 6 percent in Algeria to 11 percent in Morocco and 16 percent in Tunisia. In Morocco, the total FDI gains suffers from its population's lower education level relative to the region's, which highlights the value of further improvement in its educational attainment.

These results should be interpreted with caution. The empirical FDI model, although useful to estimate correlations on a broad sample of observations may not be adequate to forecast FDI for individual countries. Other variables such as relative wage costs, better proxy for infrastructure and other liberalization aspects would help refine the projections. In addition, the education level in Morocco had to be projected from previous data. Nonetheless this exercise illustrates the need for member countries in an RTA to align domestic business conditions with the region's best performer in order to secure their share of the FDI benefits. Hence, the creation of a regional market may encourage competition between the partner countries.

**Table B.1.4: Actual and Predicted FDI stock to GDP (in percent) for Maghreb Countries**

	Actual FDI/GDP	Predicted FDI/GDP
<b>Algeria</b>		
1985	3.9	3.8
1990	3.9	4.3
1995	4.1	5.6
2000	7.3	6.8
2004	11.4	8.6
<b>Average</b>	6.1	5.8
<b>Morocco</b>		
1985	18.3	15.8
1990	16.8	16.5
1995	23.4	24.2
2000	28.2	32.2
<b>Average</b>	21.7	22.2
<b>Tunisia</b>		
1985	55.5	45.6
1990	72.2	55.3
1995	80.3	75.6
2000	64.3	96.7
2004	77.8	87.4
<b>Average</b>	70.0	72.1

Note: Predictions based on regression in Table B.1.3.



**Table B.1.5: Growth in FDI stock to GDP (%) implied by creation of a Maghreb Regional Market**

	Total Effect	Market Size Effect	Relative Education Effect
Algeria	13.6	6.1	7.1
Morocco	-2.4	10.5	-11.7
Tunisia	19.9	15.8	3.6

Note: Predictions based on FDI stock regression in Table B.1.3. The simulation of a regional market is based on data for 2000.

### **List of South-South Regional Trade Agreements**<sup>5</sup>

#### **Latin America**

##### Central American Common Market (CACM)

Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua and Panama.

##### The Andean Pact

Bolivia, Colombia, Ecuador, Peru (since 97), and Venezuela. (Free trade zone since 1993)

##### Latin American Integration Association (LAIA) since 1981

Argentina, Bolivia, Brazil, Chile, Colombia, Ecuador, Mexico, Paraguay, Peru, Uruguay and Venezuela.

##### Caribbean Community and Common Market (CARICOM)

Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts-Nevis, St. Lucia, St. Vincent and the Grenadines, and Suriname (since 1995) and Trinidad and Tobago.

##### Common Market of the South (MERCOSUR) – since 1991

Argentina, Bolivia (since 1996), Brazil, Chile (since 1996), Paraguay and Uruguay.

##### Group of Three (G3) – since 1995

Colombia, Mexico, and Venezuela.

#### **Asia**

##### Association of South East Asian Nations (ASEAN)

Brunei, Cambodia (since 1999), Indonesia, Lao People's Democratic Republic (since 1997), Myanmar (since 1997), Malaysia, Philippines, Singapore, Thailand, and Vietnam (since 1995).

#### **Middle East and North Africa**

##### The Gulf Cooperation Council (GCC) – since 1981

Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates.

#### **Sub-Saharan Africa**

<sup>5</sup> Information on RTAs taken from Jaumotte (2004) and updated. Unless mentioned otherwise, the RTAs have been in effect during the entire period covered in this report. (1980-2004)

Economic Community of Western African States (ECOWAS)

Benin, Burkina Faso, Cape Verde, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, and Togo. (Mauritania left in 2002).

Union Economique et Monétaire Ouest-Africaine (UEMOA)

Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau (since 1997), Mali, Niger, Senegal, and Togo.

Communauté Economique et Monétaire d'Afrique Centrale (CEMAC)

Cameroon, Central African Republic, Chad, Republic of Congo, Equatorial Guinea and Gabon.

Common Market for Eastern and Southern Africa (COMESA)

Angola, Burundi, Comoros, Democratic Republic of Congo, Djibouti, Egypt, Eritrea, Ethiopia, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seycelles, Sudan, Swaziland , Uganda, Tanzania, Zambia, and Zimbabwe. (common market since 1994)

Southern African Development Community (SADC)

Angola, Botswana, Democratic Republic of Congo (1992), Lesotho, Malawi, Mauritius (since 1995), Mozambique, Namibia (1992), Seychelles (1992), South Africa (since 1994), Tanzania, Zambia, Zimbabwe, and Swaziland.

Southern African Customs Union (SACU)

Botswana, Lesotho, Namibia, South Africa and Swaziland.

Cross Border Initiative (CBI) – since 1993

Burundi, Comoros, Kenya, Madagascar, Malawi, Mauritius, Namibia, Rwanda, Seychelles, Swaziland, Tanzania, Uganda, Zambia, and Zimbabwe.

## List of Sample Economies used in FDI Regression<sup>6</sup>

### **Asia**

Bangladesh  
China  
Hong Kong  
India  
Indonesia\*  
Korea  
Malaysia\*  
Myanmar  
Pakistan  
Papua New Guinea  
Phillippines\*  
Singapore\*  
Sri Lanka  
Thailand\*

### **Middle East and North Africa**

Algeria  
Bahrain\*  
Cyprus  
Egypt  
Iran  
Israel  
Jordan  
Kuwait\*  
Morocco  
Syria  
Tunisia  
Turkey

### **Sub-Saharan Africa**

Bostwana\*  
Cameroon\*  
Congo\*  
Ghana\*  
Kenya\*  
Liberia\*  
Malawi\*  
Mali  
Mozambique\*  
Niger\*  
Senegal\*

Sierra Leone\*  
South Africa\*  
Sudan\*  
Tanzania\*  
Togo\*  
Uganda\*  
Zaire  
Zambia\*  
Zimbabwe\*

### **Europe**

Bulgaria  
Hungary  
Poland  
Romania

### **Western Hemisphere**

Argentina\*  
Bolivia\*  
Brazil\*  
Chile\*  
Colombia\*  
Costa Rica\*  
Dominicatr Republic  
Ecuador\*  
El Salvador\*  
Gautemala\*  
Haiti  
Honduras\*  
Jamaica\*  
Mexico\*  
Nicaragua\*  
Panama\*<sup>7</sup>  
Paraguay\*  
Peru\*  
Trinidad and Tobago\*  
Uruguay\*  
Venezuela\*

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<sup>6</sup> \* denotes countries that belong to a South-South RTA in 1995.

<sup>7</sup> Panama is not formally a member but has limited preferential agreements with individual members of the CACM.

#### **D. IMPACT OF SERVICE POLICY REFORMS ON GROWTH, TRADE AND FDI**

This section uses the service reform indicators constructed for Maghreb countries based on the EBRD methodology together with 24 transitional countries in Eastern Europe between 1990 and 2004 to examine the relationship between service sector reforms and FDI stock levels, merchandise exports as well as growth performance. The empirical specification builds on work done by Eschenbach and Hoeckmann (2005).

The EBRD indicators are summarized in the following section and the variables and countries examined are listed in **Table B.1.6**.

The results for the FDI stock regression using a fixed effect panel structure with interactive dummies for the Maghreb, South-East Europe is found in **Table B.1.7** and the coefficients relevant to service reforms impact is summarized in **Table B.1.9**. A unit increase in the infrastructure, financial service sector and investment climate index respectively, raise on average, the stock of FDI to GDP for the Maghreb by 8.8, 9.2 and 8.5 percentage points respectively. This is lower compared to other transitional countries for each respective index as shown in **Table B.1.9**.

The relationship between merchandise exports (in constant 2000 USD) and service reforms is also examined using a similar specification as the previous FDI stock estimation with the additional inclusion of an economic risk indicator available from the ICRG group. The results are summarized in **Table B.1.10**. On average, a unit increase in the infrastructure, financial service sector and investment climate index is expected to raised real exports by 0.11 percent annually.

Turning to the impact of service reforms in the Maghreb on real per-capita GDP, the growth regression relates per-capita GDP growth to change in the ratio of investment to GDP, inflation and each reform indicator in turn – namely, finance, infrastructure and investment climate and their interactions with Maghreb, SEE and CEE groupings. The results are shown in **Table B.1.8** and summarize in **Table B.11**. A one unit point increase in infrastructure, financial sector and investment climate is associated with an increase in per-capita growth rate of 2 percent, holding inflation and the change in investment to GDP ratio constant. It is interesting to note that the impact is lower compared to the outcomes in other Eastern European countries which appear to gain the most from the reform progress.

## **The EBRD Services Reform Indices**

The index ranges from 1 (little progress) to 4.3 (most advanced implementation of reform agenda) and has been compiled on an annual basis for the 1990-2004 period.

### **1. Finance = average of the following two banking and non-banking reform indicators :**

- *Banking and interest rate liberalization:* A 4.3 means full convergence of banking laws and regulations with BIS standards, provision of full set of competitive banking services.
- *Securities markets and non-bank financial institutions:* 4.3 means full convergence of securities laws and regulations with IOSCO standards, fully developed non-bank intermediation.

### **2. Infrastructure = average of the following five infrastructure reform indicators:**

- *Electric power:* 4.3 means Tariffs cost-reflective and provide adequate incentive for efficiency improvements. Large-scale private sector involvement in the unbundled and well-regulated sector. Fully liberalized sector with well-functioning arrangements for network access and full competition in generation.
- *Railways:* 4.3 means separation of infrastructure from operations and freight from passenger operations. Full divestment and transfer of asset ownership implemented or planned, including infrastructure and rolling stock. Rail regulator established and access pricing implemented.
- *Roads:* 4.3 means fully decentralized road administration. Commercialized road maintenance operations competitively awarded to private companies. Road user charges reflect the full costs of road use and associated factors, such as congestion, accidents and pollution. Widespread private sector participation in all aspects of road provision. Full public consultation on new road projects.
- *Telecommunications:* 4.3 means effective regulation through and independent entity. Coherent regulatory and institutional framework to deal with tariffs, interconnection rules, licensing, concession fees and spectrum allocation. Consumer ombudsman function.
- *Water and waste water:* 4.3 means water utilities fully decentralized and commercialized. Fully autonomous regulator exists with complete authority to review and enforce tariff levels and quality standards. Widespread private sector participation via service/management/lease contracts. High powered incentives, full concessions and/or divestiture of water and waste-water services in major urban areas.

### **3. Service = average of Infrastructure and Finance (used in Table 5 as an instrument)**

### **4. Invclim = Investment climate measure, the average six EBRD reform indicators:**

- *Large-scale privatization:* 4.3 means standards and performance typical of advanced industrial economies: more than 75 per cent of enterprise assets in private ownership and significant progress on corporate governance of these enterprises
- *Small-scale privatization:* 4.3 means standards and performance typical of advanced industrial economies: no state ownership of small enterprises; effective tradability of land.
- *Governance and enterprise restructuring:* 4.3 means standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.
- *Price liberalization:* 4.3 means standards and performance typical of advanced industrial economies: complete price liberalization with no price control outside housing, transport and natural monopolies.
- *Trade and foreign exchange system:* 4.3 means standards and performance typical of advanced industrial economies: removal of most tariff barriers; membership in WTO.
- *Competition policy:* 4.3 means standards and performance typical of advanced industrial economies: effective enforcement of competition; unrestricted entry to most markets.

Source: EBRD Transition Report, 2004.

**Table B.1.6: Documentation of data used in panel analysis for service reforms**

Variable Definition	<i>Growth</i> Per-capita GDP growth	<i>Investment/GDP</i> Gross fixed capital formation in % of GDP	<i>Chg Investment/GDP</i> Change in investment/GDP ratio	<i>Inflation</i> Consumer price inflation	<i>Crisis</i> Dummy for financial crisis/armed conflict
Source	World Bank WDI	IMF WEO	IMF WEO	IMF WEO	n.a.
Variable Definition	<i>FDI/GDP</i> Stock of FDI as % of GDP	<i>Finance</i> Average of EBRD reform indices on banking and non-banking financial sector, see Annex X for details.	<i>Infrastructure</i> Average of EBRD reform indices on infrastructure (telecom, rail, road, water, power) see Annex X for details.	<i>Invclim</i> Average of EBRD reform indices on privatization and liberalization, see Annex 1 for details.	<i>Service</i> Average of Invclim and infrastructure, see Annex 1 for details
Source	UNCTAD	EBRD Transition Report	EBRD Transition Report	EBRD Transition Report	EBRD Transition Report
Sample countries	Albania Armenia Azerbaijan Belarus Bulgaria Croatia	Czech Republic Estonia Georgia Hungary Kazakhstan Kyrgyz Republic	Moldova Kyrgyz Republic Latvia Lithuania Macedonia Poland	Romania Russia Slovak Republic Slovenia Tajikistan Ukraine	Uzbekistan Morocco Tunisia Algeria

**Table B.1.7: Fixed Effects Panel Estimates of FDI stock to GDP (%) on service sector reforms, 1990-2004**

<i>Model No.</i>	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent variables</i>						
infrastructure reform index	17.37 (0.99) ***	19.13 (3.27) ***				
MGB*infrastructure index		-10.30 (3.27) ***				
SEE*infrastructure index		-6.58 (2.10) ***				
finance reform index			17.38 (1.11) ***	18.35 (1.18) ***		
MGB*finance				-9.14 (4.16) ***		
SEE*finance				-4.777 (2.62) ***		
investment climate index					14.64 (1.02) ***	15.02 (1.07) ***
MGB*investment climate index						-6.49 (3.75) *
SEE*investment climate index						-2.09 (2.50)
R squared	0.51	0.52	0.45	0.45	0.41	0.41
No. of observations	370	370	370	370	370	370

Note: standard errors in bracket. Asterisks denotes significance at 10\*, 5\*\* and 1\*\*\* percent levels. R squares are for within regressions. Sample includes 27 countries. MGB= Morocco, Algeria, Tunisia; SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro

**Table B.1.8: Fixed Effects Panel Estimates of per-capita GDP growth (%) and service sector policies, 1990-2004**

<i>Model No.</i>	(1)	(2)	(3)	(4)	(5)	(6)
<i>Independent variables</i>						
Change in Investment/GDP	0.371 (0.06) ***	0.352 (0.06) ***	0.424 (0.07) ***	0.384 (0.06) ***	0.286 (0.06) ***	0.269 (0.06) ***
Inflation	-0.002 (0.00) ***	-0.001 (0.00) ***	-0.002 (0.00) ***	-0.001 (0.00) ***	-0.001 (0.00) ***	-0.001 (0.00) **
finance reform index	8.024 (0.65) ***	11.083 (0.89) ***				
MGB*finance		-9.08752 (2.37) ***				
SEE*finance		-4.61539 (1.49) ***				
CEE*finance		-6.3899 (1.69) ***				
infrastructure reform index			6.184 (0.65) ***	11.042 (0.98) ***		
MGB*infrastructure index				-8.964 (2.14) ***		
SEE*infrastructure index				-7.257 (1.47) ***		
CEE*infrastructure index				-8.150 (1.60) ***		
investment climate index					8.199 (0.54) ***	9.663 (0.64) ***
MGB*investment climate index						-7.607 (1.90) ***
SEE*investment climate index						-2.350 (1.29) *
CEE*investment climate index						-3.800 (1.73) **
R squared	0.46	0.50	0.39	0.46	0.54	0.57
No. of observations	370	370	370	370	370	370

Note: standard errors in bracket. Asterisks denotes significance at 10\*, 5\*\* and 1\*\*\* percent levels. R squares are for within regressions. Sample includes 27 countries. MGB= Morocco, Algeria, Tunisia; SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Poland, Hungary, Czech and Slovak Republic, Slovenia:

**Table B.1.9: Impact of Unit Increase in Reform Index on Stock of FDI to GDP (%), 1990-2004**

	Infrastructure	financial services	investment climate
Maghreb (MGB)	8.83	9.21	8.53
South-East Europe (SEE)	12.55	13.57	12.93
Former Soviet Union (FSU) and Central-East Europe (CEE)	19.13	18.35	15.02
<b>Average</b>	<b>17.37</b>	<b>17.38</b>	<b>14.64</b>

Source: Derived from FDI regression in Table X.

Note: SEE=Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro: CEE=Poland, Hungary, Czech and Slovak Republic, Slovenia: FSU=Estonia, Latvia and Luthuania, Russia, Ukraine, Belarus, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Krygstan, Tajikistan, Turkmenistan, Uzbekistan.

**Table B.1.10: Impact of Unit Increase in Reform Index on Real Export Growth (%), 1990-2004**

Dependent variable: log export value (constant 2000 USD)	Coeffici	Std. Error
Finance	0.112 (0.05)	**
Infrastructure	0.111 (0.05)	**
Investment Climate	0.109 (0.06)	*

Note: Results are derived from separate regression containing lagged per-capita real GDP, a ICRG economic risk index and one service reform index. \*\* denotes significance at the 5% level and \* is at the 10% level.

**Table B.1.11: Impact of Unit Increase in Service Reform Index on Annual Per-Capita Real GDP Growth (%), 1990-2004**

	Infrastructure	financial services	investment climate
Maghreb (MGB)	2.08	2.20	2.06
South-East Europe (SEE)	3.77	5.84	7.35
Central and Eastern Europe (CEE)	2.90	4.00	5.87
Former Soviet Union (FSU)	11.04	11.08	9.66

Source: Derived from growth regression in Table X.

Note: SEE=Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro: CEE=Poland, Hungary, Czech and Slovak Republic, Slovenia: FSU=Estonia, Latvia and Luthuania, Russia, Ukraine, Belarus, Moldova, Armenia, Azerbaijan, Georgia, Kazakhstan, Krygstan, Tajikistan, Turkmenistan, Uzbekistan.



## E. Growth Impact of Regional Trade Agreements

Regional integration may have positive growth effects in the presence of economies of scale. An earlier section examines the market-size impact of RTA membership on foreign direct investment. In this section, the effect of integration on per-capita growth is examined. Regional integration is measured by inclusion of an RTA variable following Matias Berhelon (2004), that not only considers whether a group of countries has an RTA, but also captures the extent of the world market that is integration into domestic markets once the agreement takes place. The RTA variable is the sum of the share of the partner countries GDP to world GDP.

The basic estimation strategy is through a scaled-down panel growth regression consisting of 94 countries between 1980 and 2004. Five year period averages are used spanning 1980 to 1984, 1985 to 1989, 1990 to 1994, 1995 to 1999 and 2004 to 2004. The regional agreements incorporated in the RTA variable covers bilateral agreements (such as US-Israel), country-association agreements (e.g. EU-Tunisia) and association agreements (eg. NAFTA, ASEAN, GCC). Per-capita GDP growth is measured using constant 2000 USD<sup>8</sup>. The control variables include initial GDP per capita, the ratio of government consumption to GDP, the investment rate, foreign direct investment as a percentage of GDP, human capital, the share of manufactured exports in total exports, the ratio of total trade to GDP<sup>9</sup> and an index of financial risk and a measure of investment climate sourced from the ICRG.

The results are shown in Table X. The estimates suggest that joining an agreement with countries with a share of world GDP of 1 percent might increase the per-capita growth rate by 0.028 percentage points. The implication of this result is that countries or regions would gain more by signing agreements with larger partners. As of 2004, per-capita growth (in constant US\$ terms) for Morocco, Algeria and Tunisia was 0.72, 3.6 and 4.9 percent respectively. Forming a Maghreb regional arrangement has a limited impact on the growth rates of the respective countries given the small size of the region's market. A more promising scenario considers the formation of a Maghreb union and its entrance into an RTA with the US or EU. This would generate additional per-capita growth for members of the Maghreb Union close to one percentage point for an agreement with the USA and 0.7 percentage point for an arrangement with the EU.

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<sup>8</sup> The growth impact of an RTA is similar when per-capita growth is measured using PPP prices.

<sup>9</sup> Additional controls variables that were initially included but later discarded due to the lack of statistically significant arising from limited variation across time in a fixed-effect specification were trading partner's growth and bordering countries share of world GDP.

**Table B.1.12: Country Fixed Effects Growth Regression, 1980-2004 (5-year averages)**

Dependent variable: per-capita GDP growth	
Log Initial per-capita GDP	-6.971 ***
Government consumption to GDP (%)	-0.067 *
Investment to GDP (%)	0.102 ***
Foreign Direct Investment to GDP (%)	0.053
Manufacturing exports to Merchandise exports (%)	0.001
Human capital (average year of schooling for pop>15age)	0.110
Trade to GDP (%)	0.029 ***
Financial risk index	0.049 **
Investment Climate index	0.341 ***
Absolute RTA	0.028 ***
Number of country groups	94
R squared (within)	0.51

Note: period dummies are not shown. \*\*\* denotes significance at 1% level, \*\* at 5% and \* at 10%.

### Impact on joining Regional Trade Agreements on Exports

**Table B.1.13: Fixed Effects Panel Estimates of (log) real export value on RTA market size**

Dependent variable: log export value (constant 2000 USD)	
Initial per-capita Real GDP	0.813 (0.09) ***
FDI inflows to GDP	0.014 (0.01) **
exchange rate risk	0.042 (0.01) ***
inflation	0.000 (0.00) *
investment climate index	0.022 (0.01) **
absolute RTA	0.004 (0.00) ***
R-square (within)	0.77
Number of observations/groups	387/112

Note: standard errors are in brackets. \*\*\* denotes significances at 1% level, \*\* at 5% and

**F. Investment Climate and Service Sector Reform Progress Indices  
for the Maghreb (EBRD methodology) for the period 1990-2004<sup>10</sup>**

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<sup>10</sup> The authors are grateful to Sami Stouli for his contributions to the Maghreb database of policy reform indicators

## EBRD: Infrastructure Indices, 1990-2004

### Electric Power Index, 1990-2004

1	Power sector operates as government department with few commercial freedoms or pressures. Average prices well below costs, with extensive cross-subsidies. Monolithic structure, with no separation of different parts of the business.
2	Power company distanced from government, but there is still political interference. Some attempt to harden budget constraints, but effective tariffs are low. Weak management incentives for efficient performance. Little institutional reform and minimal, if any, private sector involvement.
3	Law passed providing for full-scale restructuring of industry, including vertical unbundling through account separation and set-up of regulator. Some tariff reform and improvements in revenue collection. Some private sector involvement.
4	Separation of generation, transmission and distribution. Independent regulator set up. Rules for cost-reflective tariff-setting formulated and implemented. Substantial private sector involvement in distribution and/or generation. Some degree of liberalisation.
4+	Tariffs cost-reflective and provide adequate incentives for efficiency improvements. Large-scale private sector involvement in the unbundled and well-regulated sector. Fully liberalised sector with well-functioning arrangements for network access and full competition in generation.

#### Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>Sonelgaz is the state-owned monopoly over distribution, generation and distribution. No private sector involvement. Monolithic structure.</li> </ul>	1	n/a
1991	<ul style="list-style-type: none"> <li>Sonelgaz becomes a public corporation of commercial and industrial nature. (executive decree n°91-475, December 14<sup>th</sup>, 1991).</li> </ul>	1	n/a
1999	<ul style="list-style-type: none"> <li><i>Little private sector involvement (in generation)</i>: As part of Algeria's first independent power project (IPP), the state oil company, Sonatrach, has awarded GE Nuovo Pignone, a \$107m contract for the construction of a 300-mw gas turbine power plant in the Hassi Berkine area.</li> </ul>	2	1 to 2
2001	<ul style="list-style-type: none"> <li><i>Some private sector involvement (in generation)</i>. The government has opened the sector to private investment and there are plans for the construction of new, privately financed, gas-fired power generation facilities in Skikda and Arzew.</li> </ul>	2+	2 to 2+
2002	<ul style="list-style-type: none"> <li>In January 2002 parliament passed an electricity and gas law, which ends the monopoly of the state firm, Sonelgaz, over the domestic power and gas markets. The law has cleared the way for liberalisation of the sector over the next three years, through the following actions:               <ul style="list-style-type: none"> <li>opening electricity generation to full private competition. A new regulatory body, to be known as the Commission for Regulating Electricity and Gas (CREG), will act as the commissioning authority.</li> <li>The creation of two new subsidiaries of Sonelgaz, one for the transmission of electricity and one for gas. In early June the government announced that Sonelgaz's subsidiaries will be opened up to private investors, including foreigners.</li> <li>the creation of a system operator, with the job of ensuring that supply and demand are in balance. This will be a private firm with no interest in power generation;</li> <li>the <i>creation of a new market operator</i>, whose main role will be to match the offers from the generators with bids by the suppliers, traders, retailers etc;</li> <li>the <i>gradual opening of the retail market to private competition</i>. The law provides for a 30% opening of the market within three years; energy users consuming above a fixed amount will be able to choose their own supplier.</li> </ul> </li> </ul>	3	2+ to 3
2004	<ul style="list-style-type: none"> <li><i>Subsidies have not been adjusted</i> - In June 2004, CEO of Sonelgaz states that the electricity market is not to be opened to full-scale competition due to subsidies that exists in the pricing of power in the domestic market. Since the passage of the law in 2002, the government has not adjusted the subsidy system.</li> </ul>	3	n/a

Sources : Fiche de synthèse, *Le secteur de l'électricité en Algérie*, Actualisation au 11 août 2004, MINEFI-DREE/TRESOR ; EIU Country Profiles.

## Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>The Office national de l'électricité (ONE) is the state-owned operator. It was under the administrative supervision of the <i>Ministère de l'Energie et des Mines</i> and the control of the <i>Ministère des Finances et de la Privatization</i>.</li> </ul>	1	n/a
1994	<ul style="list-style-type: none"> <li><i>Separation of generation</i> - Since 1994, the ONE no longer has monopoly over generation but retains control over distribution and transmission.</li> </ul>	2	1 to 2
1995	<ul style="list-style-type: none"> <li><i>Private sector involvement in generation</i> - A BOT (build-operate-transfer) is awarded to a French consortium, led by Electricité de France for a 50-mw wind-powered generating station at Tetouan. Power will be sold to the state-owned Office national de l'électricité (ONE) under a long-term contract.</li> <li><i>Raising of tariffs to reflect cost</i> - electric prices were raised in 1996 with large users facing an increase of over 25% for peak use, while small consumers were given a 5% rebate.</li> </ul>	2	n/a
1996	<ul style="list-style-type: none"> <li><i>Further Private sector involvement in generation</i>- In February 1996 the Swiss-Swedish-US consortium, ABB-CMS Power, was awarded the contract to build two new 330-mw units at the Jorf Lasfar station and to take over management of the existing units. The ONE will retain ownership of the installations built for Jorf Lasfar I-IV, with the operator being granted a 25-year management contract.</li> </ul>	2+	2 to 2+
1997	<ul style="list-style-type: none"> <li><i>Private Sector in distribution</i> – Casablanca granted a concession for 30 year distribution of power and water to Lydec (35%), Électricité de France (18%) and the Spanish Endesa (18%) and AGBAR (5%).</li> </ul>	3-	2+ to 3-
1998	<ul style="list-style-type: none"> <li>A US\$300m 470-mw combined-cycle unit is being built at Tahaddart near Tangier, on a BOT basis by French and Spanish power companies, with ONE retaining a controlling interest.</li> </ul>	3-	n/a
2003	<ul style="list-style-type: none"> <li>In 2003 ONE selected the local Compagnie Marocaine des Hydrocarbures (CMH) and Apex-BP Solar, a subsidiary of BP France, to install a new solar power system in Chichaoua province. In addition to its obligation for supply and installation of solar panels, BP Solar Maroc has also undertaken to manage the system and bill consumers for the first ten years of operation.</li> </ul>	3-	n/a
2004	<ul style="list-style-type: none"> <li><i>No law providing for full-scale restructuring of the industry</i> - Currently, the main power electricity producer is a private one (JLEC, 60.7% of national production). The distribution is still provided by the ONE in 7 out of 11 local authorities, but the main ones have been privatized (Casablanca, Rabat, Tétouan, Tanger).</li> </ul>	3-	n/a

**Sources :** Fiche de synthèse, *Les investissements des principaux offices au Maroc*, MINEFI-DREE/TRESOR ; Fiche de synthèse, *Production et distribution d'électricité au Maroc*, Actualisation au 28 juin 2005, MINEFI-DREE/TRESOR ; EIU Country reports.

## Tunisia

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>The national operator is "Société Tunisienne de l'Electricité et du Gaz", STEG.</li> </ul>	1	
1996	<ul style="list-style-type: none"> <li><i>Separation of power generation</i> – STEG loses its monopoly on power generation. The government invites international contractors to build a combined plant with a capacity of 300-500mw on a BOT basis. STEG retains its monopoly on pricing and distribution. As of 1996, some electricity is privately produced and some imported from Algeria.</li> </ul>	2	1 to 2
1997	<ul style="list-style-type: none"> <li><i>Private sector involvement in generation</i> -A 20 year BOT for a 470 mw combined cycle plant at Radès was awarded to an international consortium.</li> </ul>	2	n/a
2002	<ul style="list-style-type: none"> <li><i>Further private sector involvement in generation</i> - Tunisia's biggest IPP in Carthage which produces 20% of the country's electricity enter service after construction delays.</li> </ul>	2+	2 to 2+
2004	<ul style="list-style-type: none"> <li><i>No law providing for full-scale restructuring of the industry</i>.</li> </ul>	2+	n/a

Source: Fiche de synthèse, *L'électricité en Tunisie*, MINEFI-DREE/TRESOR ; EIU Country Profiles.

## Water Index, 1990-2004

1 Minimal degree of decentralisation; no commercialisation. Services operated as vertically integrated natural monopolies by a government ministry or municipal departments. No financial autonomy and/or management capacity at municipal level. Low tariffs, low cash collection rates and high cross-subsidies.

2 Moderate degree of decentralisation; initial steps towards commercialisation. Services provided by municipally owned companies. Partial cost recovery through tariffs, and initial steps to reduce cross-subsidies. General public guidelines exist regarding tariff-setting and service quality but both under ministerial control. Some private sector participation through service or management contacts, or competition to provide ancillary services.

3 Fair degree of decentralisation and commercialisation. Water utilities operate with managerial and accounting independence from municipalities, using international accounting standards and management information systems. Operating costs recovered through tariffs, with a minimum level of cross-subsidies. More detailed rules drawn up in contract documents, specifying tariff review formulae and performance standards. Private sector participation through the full concession of a major service in at least one city.

4 Large degree of decentralisation and commercialisation. Water utilities managerially independent, with cash flows – net of municipal budget transfers – that ensure financial viability. No cross-subsidies. Semi-autonomous regulatory agency has power to advise and enforce tariffs and service quality. Substantial private sector participation through build-operator-transfer concessions, management contacts or asset sales in several cities.

4+ Water utilities fully decentralised and commercialised. Fully autonomous regulator exists with complete authority to review and enforce tariff levels and quality standards. Widespread private sector participation via service/ management/lease contracts. High-powered incentives, full concessions and/or divestiture of water and waste-water services in major urban areas.

### Algeria

<i>Year</i>	<i>Description</i>	<i>EBRD Index</i>	<i>Change in Value</i>
1990	<ul style="list-style-type: none"> <li>• Algeria has many institutions in charge of each task relative to water: -Les Agences de Bassins Hydrographiques (basin agencies) ; L'Agence Nationale des Ressources Hydrauliques ; L'Algérienne Des Eaux ; L'Office National de l'Assainissement ; Les Offices des Périmètres d'Irrigation. Basin agencies are in charge of the different geographical areas. But they are still under the government authority.</li> </ul>	1	n/a
1996	<ul style="list-style-type: none"> <li>• <i>Concession allowed by law</i> -Law n°96-13 of June 15th 1996 through articles 20 and 21 allowed authorities to give concessions.</li> </ul>	1+	1 to 1+
2003	<ul style="list-style-type: none"> <li>• <i>Private Sector participation through BOT</i>. Technical offers from four international groups were opened in March 2003 for a US\$200m-250m contract to build a desalination plant in Hamma, a suburb of Algiers. The Algerian Energy Company (AEC)—owned equally by Sonatrach, the state energy company, and Sonelgaz, the state power utility—is handling the tender. The winning group will form a joint venture with AEC and the offtaker, Algerienne des Eaux, to build, finance and operate the plant. A similar commercial structure has been adopted for two other power and water schemes, at the eastern port city of Skikda and the western oil and gas terminal of Arzew.</li> </ul>	2-	1+ to 2-
2004	<ul style="list-style-type: none"> <li>• Increases in water tariffs in December 2004. And initial steps to reduce cross-subsidies.</li> </ul>	2-	n/a

Sources : Fiche de synthèse, *Le secteur de l'eau en Algérie*, actualisation janvier 2005, MINEFI-DREE/TRESOR ; UNDP, *RAPPORT SOUS REGIONAL SUR LA MISE EN VALEUR DES RESSOURCES EN EAU EN AFRIQUE DU NORD*, Mokhtar BZIOUI, Mars 2005. [http://www.pnud.org.ma/pdf/sub\\_regionalreport\\_19juin\\_fr.pdf](http://www.pnud.org.ma/pdf/sub_regionalreport_19juin_fr.pdf); [Algerie-dz.com](http://www.algerie-dz.com), *Nouvelle politique de l'eau en Algérie*, January 25th, 2005 , <http://www.algerie-dz.com/article1498.html>; EIU Country Profiles.

## Morocco

<i>Year</i>	<i>Description</i>	<i>EBRD Index</i>	<i>Change in Value</i>
1995	<ul style="list-style-type: none"> <li>• <i>Decentralization reforms</i> - Law 10-95 (1995): A legislative reform which started a process of decentralization of the water resource management. Led to the creation of 7 basin agencies equipped with financial autonomy. These agencies are in charge of: water policy and integrated management missions in the frame of hydrographic basins.</li> </ul>	2+	2- to 2+
1997	<ul style="list-style-type: none"> <li>• <i>Private sector participation through full concession of a major service in at least one city</i> - In April 1997 France's Lyonnaise des eaux was granted a 30-year concession to run Casablanca's water, waste-water and power systems.</li> </ul>	3-	2+ to 3-
1998	<ul style="list-style-type: none"> <li>• <i>Private sector participation through full concession of a major service in at least one city</i> - A Portuguese-Spanish consortium was granted a similar contract in 1998 for Rabat.</li> </ul>	3-	n/a
2004	Many of the current investments are private (4.1 bns Dhs by the LYDEC in 2003) There are 13 local authorities for distribution of water. VEOLIA ENVIRONNEMENT in Tanger and Tétouan and Rabat.	3-	n/a

Source : Fiche de synthèse, *Les investissements des principaux offices au Maroc*, MINEFI-DREE/TRESOR ; Fiche de synthèse, *Le secteur de l'environnement au Maroc*, actualisation au 9 mai 2005, MINEFI-DREE/TRESOR. ; Ministère de l'écologie (France)- Politique de l'eau : <http://www.water-international-france.fr>; Ministère de l'équipement et du transport (Morocco) : <http://www.mtpnet.gov.ma>; UNDP, *RAPPORT SOUS REGIONAL SUR LA MISE EN VALEUR DES RESSOURCES EN EAU EN AFRIQUE DU NORD*, Mokhtar BZIOUI, Mars 2005. [http://www.pnud.org.ma/pdf/sub\\_regionalreport\\_19juin\\_fr.pdf](http://www.pnud.org.ma/pdf/sub_regionalreport_19juin_fr.pdf); EIU Country Profiles.

## Tunisia

<i>Year</i>	<i>Description</i>	<i>EBRD Index</i>	<i>Change in Value</i>
1990	<ul style="list-style-type: none"> <li>• In Tunisia, every institution relative to water is under the authority of a ministry (<i>Ministère de l'Agriculture de l'Environnement et des ressources Hydrauliques, Ministère de l'Équipement et de l'Habitat, Ministère du Transport, et Ministère de la Santé</i>). Two public bodies manage the water sector: SONEDE (<i>Société nationale de distribution et d'exploitation de l'eau</i>) and ONAS (<i>Office national de l'assainissement</i>). SONEDE missions: water distribution and production; development.</li> </ul>	1	
2003	<ul style="list-style-type: none"> <li>• The government is encouraging the private sector, and especially foreign investors, to take up concessions for major infrastructure projects. On the list is a Tunisouest wastewater system.</li> </ul>		

Sources : UNDP, *RAPPORT SOUS REGIONAL SUR LA MISE EN VALEUR DES RESSOURCES EN EAU EN AFRIQUE DU NORD*, Mokhtar BZIOUI, Mars 2005. [http://www.pnud.org.ma/pdf/sub\\_regionalreport\\_19juin\\_fr.pdf](http://www.pnud.org.ma/pdf/sub_regionalreport_19juin_fr.pdf); SONEDE, <http://www.semide.tn/SONEDE.htm#1>; ONAS, [www.onas.nat.tn/](http://www.onas.nat.tn/); EIU Country Profiles.

## Railway Index, 1990-2004

1 Monolithic structure operated as government department, with few commercial freedoms. No private sector involvement and extensive cross-subsidisation.

2 Rail operations distanced from state, but weak commercial objectives. Some business planning, but targets are general and tentative. No budgetary funding of public service obligations. Ancillary businesses separated, but little divestment. Minimal private sector involvement.

3 Commercial orientation in rail operations. Freight and passenger services separated and some ancillary businesses divested. Some budgetary compensation available for passenger services. Improved business planning with clear investment and rehabilitation targets, but funding unsecured. Some private sector involvement in rehabilitation and/or maintenance.

4 Railways fully commercialised, with separate internal profit centres for passenger and freight. Extensive market freedoms to set tariffs and investments. Implementation of medium-term business plans. Ancillary industries divested. Private sector participation in freight operation, ancillary services and track maintenance.

4+ Separation of infrastructure from operations and freight from passenger operations. Full divestment and transfer of asset ownership implemented or planned, including infrastructure and rolling stock. Rail regulator established and access pricing implemented.

### Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>• SNTF is a monolithic structure operated as a government department.</li> </ul>	1	n/a
1996	<ul style="list-style-type: none"> <li>• <i>Minimal private sector participation.</i> - At present the government plans to partly privatise the state railway company, Societe Nationale de Transport Ferroviaire (SNTF), which controls 4,200 km of track. Local companies have started to extend rail links to Ouargla and Hassi Messaoud.</li> </ul>	1	n/a
2000	<ul style="list-style-type: none"> <li>• According to the minister of transport, the SNTF will now be opened up to private investment. However, restructuring to focus on core business activities is required before any major private- sector opening can be expected. SNTF's passenger service is extremely depleted and the company transports mainly cargo. Rolling stock is in desperate need of replacement and the track and signalling infrastructure also require upgrading.</li> </ul>	1	n/a
2001	<ul style="list-style-type: none"> <li>• In 2001 the government presented to parliament's economic committee draft legislation to open the rail network to private business, operating on a franchise basis. Under the terms of the draft bill the state will lease out franchises for running rolling stock, commercial management, and maintaining and running signalling and safety systems to the private sector. However, by September 2005 there had been no further progress in this plan.</li> </ul>	1	n/a

Sources: SNTF, <http://www.sntf.dz/>; Algerie-dz.com, *500 milliards pour le rail algérien*, April 24th, 2005, <http://www.algerie-dz.com/article2337.html>; *Investir en Algérie*, May 17th 2004, KPMG Algeria, [www.algeria.kpmg.com/fr/Documents/InvestirFr.pdf](http://www.algeria.kpmg.com/fr/Documents/InvestirFr.pdf); - EIU Country Profiles.

### Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>• The state railway, run by the Office national des chemins de fer (ONCF)</li> </ul>	1	n/a
1997	<ul style="list-style-type: none"> <li>○ <i>Restructuring and private sector participation.</i> The Office national des chemins de fer (ONCF) is being restructured under a \$600m programme and may eventually be privatised. In 1997 the project received \$110m from the European Investment Bank, \$88m from the African Development Bank, \$85m from the World Bank, and \$25m in government-guaranteed bank loans to rehabilitate the ailing industry over a period of five years.</li> <li>○ France has been active in this sector since 1997, upgrading the track system and rolling stock, and agreeing in February 1998 to finance a study for an underground railway for Casablanca.</li> </ul>	2	1 to 2
2002	<ul style="list-style-type: none"> <li>○ <i>Separation of infrastructure from operations</i> - ONCF is being transformed into a limited company and divided into two arms, one to manage the infrastructure and the other to run services.</li> </ul>	2+	2 to 2+
2003	<ul style="list-style-type: none"> <li>• <i>Business planning</i> - In 2003 Morocco and Spain reached an agreement to build a double-track railway tunnel under the Strait of Gibraltar, the first direct rail link between Europe and Africa.</li> </ul>	2+	n/a

Source: Fiche de synthèse, *Les investissements des principaux offices au Maroc*, MINEFI-DREE/TRESOR; Meeting with Alexandre Baron, associate at the French embassy's trade and economics office in Morocco



## Tunisia

Year	Description	EBRD Index	Change in Value
1990-1997	<ul style="list-style-type: none"> <li>Tunisia's 2,190-km rail system is operated by the Société nationale des chemins de fer tunisiens (SNCFT) and comprises a north-south coastal line and four east-west branches to Jendouba, Le Kef, Kasserine and Tozeur.</li> </ul>	1	n/a
1998	<ul style="list-style-type: none"> <li><i>Some business planning</i> - Since 1997 (under the IXth Plan framework), the SNCFT was reorganized by operational sectors and 3 agreements were signed between the state and the SNCFT setting the rules of operations for some lines and in particular unprofitable ones.</li> <li><i>Rail operations distanced from state</i> - Law n° 98-90 (November 2<sup>nd</sup>, 1998) relative to SNCFT: this law conferred to the SNCFT operations and management of railways infrastructures through a concession.</li> </ul>	1+	1 to 1+
2002	<i>Improved business planning</i> - 2002-2006 (Xth Plan): stabilization and improvement of the financial situation of the SNCFT.	2	1+ to 2
		2+	2 to 2+

Source : Tunisie.com, <http://www.tunisie.com/economie/transport.html>; European Union website, [http://europa.eu.int/comm/world/enp/pdf/action\\_plans/Proposed\\_Action\\_Plan\\_EU-Tunisia\\_FR.pdf](http://europa.eu.int/comm/world/enp/pdf/action_plans/Proposed_Action_Plan_EU-Tunisia_FR.pdf); Ministerial website, *Ministère du transport, Principales réalisations et perspectives d'avenir*; <http://www.ministeres.tn/html/ministeres/realisations/transport.html>, SNCFT, *Société nationale des Chemins de Fer Tunisiens*, [www.sncft.com](http://www.sncft.com); EIU Country Profile.

## Road Index, 1990-2004

1	Minimal degree of decentralisation and no commercialisation. All regulatory, road management and resource allocation functions centralised at ministerial level. New investments and road maintenance financing dependent on central budget allocations. Road user charges not based on the cost of road use. Road construction and maintenance undertaken by public construction units. No public consultation in the preparation of road projects.
2	Moderate degree of decentralisation and initial steps in commercialisation. Road/highway agency created. Improvements in resource allocation and public procurement. Road user charges based on vehicle and fuel taxes, but not linked to road use. Road fund established, but dependent on central budget. Road construction and maintenance undertaken primarily by corporatised public entities, with some private sector participation. Minimal public consultation/participation on road projects.
3	Fair degree of decentralisation and commercialisation. Regulation and resource allocation functions separated from road maintenance and operations. Level of vehicle and fuel taxes related to road use. Private companies able to provide and operate roads under negotiated commercial contracts. Private sector participation in road maintenance and/or through concessions to finance, operate and maintain parts of highway network. Limited public consultation/participation and accountability on road projects.
4	Large degree of decentralisation. Transparent methodology used to allocate road expenditures. Track record in competitive procurement for road design, construction, maintenance and operations. Large-scale private sector participation in construction, operations and maintenance directly and through public-private partnerships. Substantial public consultation/ participation and accountability on road projects.
4+	Fully decentralised road administration. Commercialised road maintenance operations competitively awarded to private companies. Road user charges reflect the full costs of road use and associated factors, such as congestion, accidents and pollution. Widespread private sector participation in all aspects of road provision. Full public consultation on new road projects.

## Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li><i>Minimal degree of decentralisation and no commercialisation and all regulatory, road management and resource allocation functions are centralised at ministerial level</i> Algeria has a very small highway network (few hundreds kms) and a very large road network (100,000 kms). Road management is under supervision of the <i>Direction des routes (Ministère des travaux publics)</i> which elaborates, evaluates and implement the road policy concerning roads and highways infrastructure as well as roads planning and development.</li> </ul>	1	n/a
2004	<ul style="list-style-type: none"> <li>3 sub-divisions: <i>sous-direction des programmes routiers</i> (roads), <i>sous-direction des ouvrages d'art</i> (bridges...), <i>sous-direction des autoroutes</i> (highways).</li> <li>Road maintenance is under the responsibility of the <i>Direction de l'Exploitation et de l'Entretien Routiers</i>. The website of the ministry underlines the weakness of roads maintenance in Algeria and a new policy has been elaborated to improve roads quality (<i>schema directeur 2005-2025</i>). 2 national highways agencies have been created recently. ANA: (<i>Agence Nationale des Autoroutes</i>) and AGA (<i>Algérienne de Gestion des Autoroutes</i>).</li> </ul>	1	n/a

Sources: Ministère des Travaux Publics, <http://www.mtp-dz.com/>; Algeria Embassy in Canada, [http://embassyalgeria.ca/html/survol1\\_12\\_surv\\_economie.htm](http://embassyalgeria.ca/html/survol1_12_surv_economie.htm); EIU, Country Report, various issues.

## Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>Initial steps in commercialization and road agency created. In 1989 a highway agency was created by the state - the Société nationale des autoroutes du Maroc (ADM) and taxes related to road were allowed (toll road). Regulation and resources allocation functions (which are under the authority of the <i>Direction des Routes et de la Circulation Routière – DRCR</i>) are separated from operation and construction, which are provided after invitations to tender (<i>appels d'offres</i>).</li> </ul>	2-	n/a
1993	<ul style="list-style-type: none"> <li>Road users charges based on vehicle and fuel taxes. - Toll roads were made possible by the law 4-89, decree issued on February 2<sup>nd</sup> 1993, amended by law 21-03, which defined highways and allowed for private sector participation in road maintenance through concessions to finance, operate and maintain parts of highway network. This law linked toll road to maintenance and amortization of highways (art 1).</li> </ul>	2	2- to 2
1995	<ul style="list-style-type: none"> <li>In 1995 the government authorised ADM to raise funds on the stock market for its programme in order to supplement public funding (some private financing).</li> </ul>	2+	2 to 2+
2004	<ul style="list-style-type: none"> <li>ADM is a SOE: 39,3% of shares belong to the state. The Fonds Hassan II, a caritative fund created by Hassan II now owns 44.92%.</li> </ul>		

Sources : Autoroutes du Maroc: <http://www.adm.co.ma/home.htm>, <http://www.delmar.cec.eu.int/fr/meda1/medai20.htm>, <http://www.mtpnet.gov.ma/dgh/semide/fr/themes/instit.htm>; EIU, Country Report, various issues.

## Tunisia

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>All regulatory, road management and resource allocation functions centralized at the ministerial level. The ministry in charge of roads, <i>Ministère de l'équipement, de l'habitat et de l'aménagement du territoire</i>, describes the following tasks of the ministry concerning roads: maintenance, development, modernization as well as management and investments. Tunisia has a limited highway network and is still under ministerial authority.</li> </ul>	1	
2004	<ul style="list-style-type: none"> <li>The private sector has been called upon by the government to undertake future motorway construction on a concessionary basis, but has so far shown little interest in doing so. There is a 20,000-km network of primary and secondary roads, which are mostly paved and reasonably maintained. The network has received substantial investment but is increasingly congested, especially in the large towns.</li> </ul>	1	

Source: Ministère de l'équipement, de l'habitat et de l'aménagement du territoire, <http://www.ministeres.tn/html/ministeres/attributions/equipement.html>, GEA (information and electronic technology for toll roads) [http://www.gea.fr/Francais/Gea\\_ref\\_fr.htm](http://www.gea.fr/Francais/Gea_ref_fr.htm), allAfrica.com, article about budgetary debates in Tunisia –Dec 4<sup>th</sup> 2005) <http://fr.allafrica.com/stories/200512050529.html>, EIU Country Profiles.

## ICT Index, 1990-2004

1 Little progress in commercialisation and regulation. Minimal private sector involvement and strong political interference in management decisions. Low tariffs, with extensive cross subsidisation. Liberalisation not envisaged, even for mobile telephony and value-added services.

2 Modest progress in commercialisation. Corporatisation of dominant operator and some separation from public sector governance, but tariffs are still politically set.

3 Substantial progress in commercialisation and regulation. Telecommunications and postal services fully separated, and cross-subsidies reduced. Considerable liberalisation in the mobile segment and in value-added services.

4 Complete commercialisation, including privatisation of the dominant operator, and comprehensive regulatory and institutional reforms. Extensive liberalisation of entry.

4+ Effective regulation through an independent entity. Coherent regulatory and institutional framework to deal with tariffs, interconnection rules, licensing, concession fees and spectrum allocation. Consumer ombudsman function.

### Algeria

Year	Description	EBRD Index	Change in Value
1999	<ul style="list-style-type: none"> <li>In September 1999 Arab investors from Egypt, the United Arab Emirates and Jordan signed an agreement with a local firm, Heelit Holdings, to form a mobile telecommunications company. Heelit has been awarded a Global System for Mobile Communications (GSM) licence to operate across the whole country. The first phase of the project was completed by end-1999, with the network operational in January 2000 .The development of the sector is seen as essential for attracting foreign investment to the country. Algeria has a limited analogue domestic mobiles system, which was installed by Finland's Nokia in 1989.</li> </ul>	1+	1 to 1+
2000	<ul style="list-style-type: none"> <li><i>Modest progress in commercialization.</i> Both houses of parliament have recently approved a post and telecoms bill that will end the state's monopoly of the sector. An international tender for a private GSM licence is expected to be launched in 2001. The telecoms law of 2000 sets out plans for the eventual privatisation of the sector, providing for a state role restricted to regulatory rather than service provision activities.</li> </ul>	2	1+ to 2
2001	<ul style="list-style-type: none"> <li><i>Progress in commercialization and regulation. Telecoms and postal service separated.</i> As part of plans to restructure the telecommunications sector, the government has set up a new joint-stock company, Algerie Telecom, to take over the operation of fixed-line services and of the global system for mobiles (GSM) network from the Posts and Telecommunications Ministry (PTT). This was accompanied by the creation of an independent regulatory agency, Autorité de régulation de la poste et des télécommunications.</li> <li><i>Considerable liberalisation in the mobile segment and in value-added services</i> Algeria's first private global system for mobile communications (GSM) licence was awarded to Orascom Telecom (OT) of Egypt in mid-July 2001. Orascom Telecom's licence is for 15 years, automatically renewable for five-year periods. The only other GSM service is operated by the state-owned telecoms monopoly, Algerie Telecom, and this suffers from both high prices and poor coverage. Furthermore, OT is protected from the entry of competitors until 2004 by a generous exclusivity clause in its contract. Nevertheless, AT is in the process of upgrading its services.</li> </ul>	3	2 to 3
2004	<ul style="list-style-type: none"> <li>The government put the fixed-line section of Algérie Telecom up for sale in early 2004, but received no offers. The poor response was attributed to the high asking price and the low financial returns from fixed-line services.</li> </ul>	3	n/a

Source: Fiche de synthèse, *Le secteur des Télécommunications en Algérie*, Actualisation au 19 juin 2005, MINEFI-DREE/TRESOR ; EIU Country Profiles.

### Morocco

Year	Description	EBRD Index	Change in Value
1990-1993	<ul style="list-style-type: none"> <li>Office National des Postes et Télécommunications (ONPT) runned as a state-owned enterprise monopoly. Planning and regulations setting were devolved to the state (Ministère des Postes et Télécommunications). No private sector involvement.</li> </ul>	1	n/a
1994	<ul style="list-style-type: none"> <li><i>Modes progress in commercialization.</i> First GSM licence awarded. Until 1994 (M.Filali's government), the ONPT management was under the minister personal authority.</li> </ul>	2	1 to 2
1996	<ul style="list-style-type: none"> <li><i>Progress in commercialization and regulation.</i> In 1996, a telecommunication law allowed for competition in all the segments of the market and set up an independent regulatory agency, the Agence nationale de régulation des télécommunications (ANRT). The terms of the mobile license created a competitive</li> </ul>	2+	2 to 2+

	environment by allowing the new entrant to develop its own network and by leaving open the possibility of extending the range of services it can provide. The licensing process is conducted by the ANRT which sets out criteria for evaluating bids in a tender document and asks qualified bidders to make technical and financial bids. A bid evaluation report was also published on the ANRT website.		
1997	<ul style="list-style-type: none"> <li>• <i>Telecommunication and postal services separated</i> - In 1997 the Office national des postes et télécommunications (ONPT) was split into two parts, Ittissalat al-Maghrib, which covers telecommunications, and Barid al-Maghrib, which handles post office services.</li> </ul>	3-	2+ to 3-
1999	<ul style="list-style-type: none"> <li>• <i>Liberlization in the mobile segment</i>. Until 1999 the state-owned Maroc Télécom (MT) was the monopoly telecoms provider. The licence for the country's second global system for mobile com-munications (GSM) was won in 1999 by Médi-Télécom (MEDITEL) a private consortium led by Spain's Telefonica, with a bid of US\$1.1bn.</li> </ul>	3	3- to 3
2000	<ul style="list-style-type: none"> <li>• In 2000, MEDITEL entered the market of the mobile phone, triggering a fierce war with MAROC TELECOM, and a decrease in prices. In addition to changing its name (Maroc-Telecom) and cutting fixed-line telephone tariffs by 10%, the company has reduced mobile phone subscription and connection charges, issued cheaper pre-paid phone cards, and made tariff cuts—the latest of which, effective from November 1st 1999, saw the rates for GSM calls drop by 33%.</li> </ul>	3	n/a
2001	<ul style="list-style-type: none"> <li>• <i>Substantial progress in commercilization</i>. In December 2000 a 35% stake in Maroc-Télécom (MT) was sold to Vivendi-Universal of France for US\$2.2bn. The IMF notes that the liberalization and privatization of the telecommunication sector has not only brought in substantial financial benefits, but also increased efficiency and competition resulting in reduced communication prices while creating a large number of jobs.</li> </ul>	3+	3 to 3+
2004	<ul style="list-style-type: none"> <li>• <i>Effective regulation through independent entity</i>. The government has said it will relaunch the liberalisation of the telecommunications sector in 2004, with the sale of a second fixed-line telephony licence. However, tenders for the licence are unlikely to be issued until later in the year, because the telecoms regulator, Agence nationale de réglementation des telecommunications (ANRT), wants to make sure that the licence is marketed correctly.</li> <li>• <i>Extensive liberalization of entry</i>. Law n°55-01 modifies and completes law n°24-96 was published on Nov 8<sup>th</sup> 2004 to continue the liberalisation process: licence number 2 was cut into pieces to allow for less important operators to enter the market and compete with MAROC TELECOM.</li> <li>• <i>Considerable liberalization in the mobile segment</i>. In November 2004 the government disposed of a further 30.9% of MT stock: 16% (for Dh12.4bn) by direct sale to France.s Vivendi Universal and 14.9% (for Dh9bn) by stockmarket flotation in Casablanca and Paris. Vivendi, which bought a 35% stake in MT for Dh23.3bn in 2001, now has a controlling stake of 51%. The Moroccan state will hold its remaining 34.1% at least until 2007.</li> </ul>	4-	3+ to 4-

Source : Fiche de synthèse, *Les télécommunications au Maroc*, Actualisation au 6 décembre 2004, MINEFI-DREE/TRESOR ; Ittissalat al-Maghrib website ; *Projet pour la réforme du secteur des télécommunications au Maroc*, Mohamed SOUAL <http://www.maroc2020.ma/Telecom.htm#T3>, EIU Country Profiles, 1996-2005, IMF Country Reports, various issues.

## Tunisia

Year	Description	EBRD Index	Change in Value
1996	<ul style="list-style-type: none"> <li>• <i>Corporatisation of operator</i>. In early 1996 the government shifted responsibility for the network from the communications ministry to a new public company, Office tunisie telecoms, to increase efficiency and speed up the installation of 880,000 new lines and 58 digital switching centres. Work has begun on building a GSM cellular telephone network for 200,000 subscribers.</li> </ul>	1+	1 to 1+
1998	<ul style="list-style-type: none"> <li>• <i>Separation of telecom and postal services</i>. Telecommunications and postal services were fully separated since June 15<sup>th</sup> 1998, LA POSTE TUNISIENNE was created at that time.</li> </ul>	2	1+ to 2
2001	<ul style="list-style-type: none"> <li>• <i>Progress in commercialization and regulation</i>. New telecommunications code (2001): creation of an authority of regulation, the <i>Instance Nationale des Télécommunications</i> (INT), and an attempt to introduce competition in the sector. In 2001 TT invited tenders for the first private GSM licence, with the winner required to inaugurate its service in early 2002.</li> </ul>	2+	2 to 2+
2002	<ul style="list-style-type: none"> <li>• <i>Progress in commercialization</i> - In May 2002 Orascom Telecom Tunisia (OTT) bought a second mobile phone licence for US\$454m and granted Alcatel the US\$125m contract to set up the network. Tunisia.s first private GSM network was inaugurated at the end of December 2002. The company is marketing its service</li> </ul>		

	aggressively under the .Tunisiana. brand.		
2003	<ul style="list-style-type: none"> <li>The state telecoms company, Tunisie télécom (TT), reduced the cost of international calls by over 25% from January 2003. Despite the drop in local and international call charges in recent years, they were still above the international average before the latest reductions. The recent price cuts have narrowed the gap, but overseas calls still remain relatively expensive. Fixed-line density remains low by developed-nation standards.</li> </ul>	3	n/a
2004	<ul style="list-style-type: none"> <li>TT's status was changed to a société anonyme (limited company) in April 2004 in preparation for a sell-off.</li> <li>Aggressive price competition between the two GSM providers, which has led to significant reductions in activation and usage charges. TT cut its mobile-phone usage tariffs in late 2003 by 11% and by 25% in May 2004. TT has also responded to competition from Tunisiana by launching new mobile-phone services, including overseas call transfers for pre-paid mobile subscribers, itemised billing, access to account balances by text-message, and internal mobile phone networks for companies.</li> <li>The government has also awarded a concession to build and operate a VSAT network, with international connectivity (TT's VSAT services are currently limited to Tunisia itself).</li> </ul>	3	n/a

Source: March 2000, IMF Country Report No. 00/37, *Tunisia: Recent Economic Development*; TUNISIE TELECOM website: <http://www.tunisiatelecom.tn/fr/tuntel/activites.htm>; Instance Nationale des Télécommunications website: <http://www.intt.tn/site/fr/>; LA POSTE TUNISIENNE website : <http://www.poste.tn/index.htm>; EIU Country Profiles.

## EBRD: Financial Sector Indices, 1990-2004

### Banking & Interest Rate Liberalization Index, 1990-2004

1 Little progress beyond establishment of a two-tier system.
2 Significant liberalisation of interest rates and credit allocation; limited use of directed credit or interest rate ceilings.
3 Substantial progress in establishment of bank solvency and of a framework for prudential supervision and regulation; full interest rate liberalisation with little preferential access to cheap refinancing; significant lending to private enterprises and significant presence of private banks.
4 Significant movement of banking laws and regulations towards BIS standards; well-functioning banking competition and effective prudential supervision; significant term lending to private enterprises; substantial financial deepening.
4+ Standards and performance norms of advanced industrial economies: full convergence of banking laws and regulations with BIS standards; provision of full set of competitive banking services.

#### Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>Since 1968 the state banking sector has been dominated by three major commercial institutions; Banque Nationale d'Algerie (BNA), Banque Exterieur d'Algerie (BEA) and Credit Populaire d'Algerie (CPA). Two other commercial banks are Banque Algerienne de Developpement (BAD), established in 1963, and Caisse Nationale d'Epargne et de Prevoyance, the national savings bank.</li> <li>Audits of state-owned local banks carried out by international firms since late 1994 showed that, with the exception of BNA, all local institutions required re-capitalisation to reach initial capital adequacy ratios of 4%. (Basle banking requirements stipulate a minimum of 10%).</li> </ul>	1	n/a
1995	<ul style="list-style-type: none"> <li><i>Presence of private banks.</i> The first local private bank, Union Bank, has been operating since late 1995 and other private banks are being created, including First Private Bank of Algeria, in which Societe generale of France is expected to have a 45% stake.</li> </ul>	1+	1 to 1+
1996	<ul style="list-style-type: none"> <li>Private companies are in principle permitted to set up money-changing shops following a December 1996 directive, opening another field previously restricted to state-owned banks. This move was seen as a prelude to Algeria declaring current-account convertibility under the IMF's Article VIII terms.</li> </ul>	1+	n/a
2001	<ul style="list-style-type: none"> <li><i>Limited lending to private sector.</i> There is a reluctance among commercial banks to make investment loans to the private sector. Claims on the private sector accounted for only 20% of total commercial banks' claims at end-2001, and this included short-term claims.</li> </ul>	1+	na/
2004	<ul style="list-style-type: none"> <li>The state-owned banks dominate the sector, accounting for over 95% of total bank assets. They have tended to lend to loss-making public companies or regime insiders, with little or no credit risk assessments.</li> <li>The central bank made a modest start to the process of upgrading the sector in May 2004 by increasing the minimum capital requirement for foreign branches to AD2bn (US\$29m) from a previous level of AD500m. Some of the 13 foreign banks licensed to operate in Algeria already have capital in excess of the previous minimum level.</li> <li>The Ministry of Finance has tightened its control on public banks through strengthened performance contracts. Modernization of the payment system and the information and accounting systems is in progress. The latter should significantly improve the quality and timeliness of data reporting and should further facilitate the conduct of banking supervision by BA, which continues to be strengthened with Fund technical assistance.</li> </ul>	2-	1+ to 2-

Sources: *New Roles for Banks in Algeria*, Remarks by Jules Erik J. De Vrijer, International Monetary Fund At the US-Algeria Business Council Banking and Finance Symposium New York, February 3, 2005; Report for 2003 on the annual Article IV consultation (IMF Country Report No. 04/33); February 2004, IMF Country report No.04/31, *Algeria: selected issue and statistical appendix*; EIU Country Profiles.

## Morocco

Year	Description	EBRD Index	Change in Value
1990-1993	<ul style="list-style-type: none"> <li>• <i>Progress in banking liberalization.</i> Because of the structural adjustment plan of the early 80's, the moroccan financial sector has been deeply reformed, 3 axes: reforming capital markets, liberalisation of financial operations and reform of the bank regulatory framework. This led to the <b>1993 bank law</b> which introduced: liberalization of the credit allocation, liberalization of debtor interest rates (1996) and the creation of an interbank change market. The liberalization of the bank sector happened with the strengthening of the prudential framework which have uncovered weaknesses in some of the smaller commercial banks, prompting speculation of mergers or takeovers.</li> </ul>	1+	
1996	<ul style="list-style-type: none"> <li>• <i>Interest rates were deregulated</i> in 1996, ending the system of fixed rates and allowing banks to set rates according to their own credit assessments of customers. Reserve requirements for commercial banks have also been reduced from 20% to 15%.</li> <li>• Other reforms scheduled for 1996 included a secondary market in public debt, an interbank foreign exchange market and the launch of privatisation bonds and global depository receipts (GDRs). At present only the interbank foreign exchange market has been implemented.</li> <li>• <i>Regulations moving towards BIS standards</i> - Measures to improve banking regulation include the enforcement of the 8% capital-adequacy ratio for banks set by the Bank for International Settlements (BIS). In 1996 the risk ratio for lending to single borrowers was raised from 7% to 10% of equity (from 7%). Provisioning requirements were also tightened.</li> </ul>	2	1+ to 2
1997	<ul style="list-style-type: none"> <li>• <i>Reducing preferential access to cheap financing</i> - Mandatory lending to the government at a discount was abolished in 1997- banks will no longer be required to buy Treasury bills at below-market rates, thus forcing the Treasury to compete with the private sector for funds.</li> </ul>	2+	2 to 2+
2002	<ul style="list-style-type: none"> <li>• <i>Limited term lending to private enterprise.</i> According to the World Bank, "serious problems" are evident in Morocco's financial sector, which have constrained the provision of credit to local firms at reasonable interest rates. Moroccan manufacturing firms are financed overwhelmingly from the owners' equity and retained earnings. A World Bank survey of 2002 found that of the typical balance sheet, only 20% of financing came from the banking sector. This compares unfavourably with India (36%) and Thailand (47%). Lending rates also remain high, despite the fact that inflation and commercial banks' cost of capital are low.</li> </ul>	2+	n/a
2004	<ul style="list-style-type: none"> <li>• IMF observes that the central bank, Bank Al-Maghrib (BAM) has made significant progress in the implementation of FSAP recommendations to strengthen banking supervision and improve banks' risk management practices.</li> <li>• <i>Full interest-rate liberalization.</i> In January 2004 the central bank changed the way that it manages the country's monetary supply, in a move that should encourage commercial banks to increase their lending, by lowering their cost of capital. The bank has abandoned a fixed 3.25% interest rate for its daily repo auctions (the rate offered by the central bank for very short-term lending to the government) in favour of weekly tenders with a minimum 2.25% rate. The move will bring Treasury bill and interbank rates down (interbank rates fell from 2.5% to 2% in the first week of January 2004 according to the IMF) and should encourage the commercial banks, which have relied heavily on the risk-free practice of financing the government's daily needs, to turn to longer-maturity investments and to commercial customers.</li> </ul>	3-	2+ to 3-

Sources : Fiche de synthèse, *Le secteur bancaire au Maroc* 26 juillet 2004, MINEFI-DREE/TRESOR ; EIU Country Profiles ; -IMF Country Reports.

## Tunisia

Year	Description	EBRD Index	Change in Value
1990	Through amendments to the banking law in December 1989, the government strengthened the central bank authority and widened its regulatory and supervisory powers, and on this basis, revised in 1991 the existing prudential regulations in order to bring them in line with international standards. The minimum capital adequacy ratio is fixed at 5% in accordance with the Basle Accord for tier I capital.	1+	
1994	<p><i>Progress in framework for prudential supervision and regulation.</i> Legislation to increase competition, improve efficiency and bring the banking sector in line with international banking norms was introduced in February 1994. The law sought to increase competition by allowing all banks to take on commercial, development and offshore functions; however, most have preferred to remain in their own niche markets.</p> <ul style="list-style-type: none"> <li>• The law also introduced tighter standards of prudence against risk: banks are required to set aside at least 50% of their profits to cover bad debts estimated at \$3bn; they are required to meet a 5% capital adequacy requirement (although state-owned commercial banks have yet to do so); their permitted exposure to a single sector has been reduced from 40% to 25% of equity; and banks are not allowed to make unsecured loans.</li> <li>• Banks were also allowed to take on commercial, development and offshore functions. The law also shifts the Banque Centrale de Tunisie, (BCT, the central bank), from active management of the financial sector to a supervisory and regulatory role.</li> </ul>	2	1 to 2
1996	<ul style="list-style-type: none"> <li>• <i>Full interest rate liberalization</i> - The liberalization of bank lending interest rates was completed with the elimination of mandatory lending to priority sectors and associated preferential interest and refinancing rates.</li> </ul>		
1999	<ul style="list-style-type: none"> <li>• <i>Progress in establishment of bank solvency and reinforcing prudential regulations.</i> Under a reform program launched in 1999 with the support of the World Bank, significant progress has been made in restructuring public sector banks and in reinforcing prudential regulations in the banking sector. The capital asset ratio for the banking sector as a whole rose from 8.9 percent in 1998 to 10.1 percent in 1999 (only one bank still failed to reach the minimum 8 percent ratio). Furthermore, the level of unprovisioned bad loans was reduced to 14.1 percent of total liabilities in 1999 from over 20 percent in 1997. However, the burden of nonperforming loans is still high (20 percent of GDP in 1999).</li> </ul>	2+	2 to 2+
2004	<ul style="list-style-type: none"> <li>• The banking sector has generally been strengthened in recent years by a downward trend in NPLs, government guarantees of public-sector debt and Banque centrale de Tunisie (central bank) insistence on higher provisioning. Nevertheless, many banks still have a high level of credit risk in their lending profile, and the adoption of new technology in banks' operations has been fairly slow. The system also remains characterised by a weak payment culture and a legal environment that is unfavourable to creditors. These problems dampen the pace of economic modernisation since banks with poor loan portfolios are reluctant to extend credit to small and medium-sized enterprises.</li> </ul>		

Source: December 1998, IMF Staff Country Report No. 98/129, *Tunisia: Banking System Issues and Statistical Appendix.*; February 24, 2005, IMF, TUNISIA, Preliminary Findings of the Interim Staff Visit.; IMF Country Reports; EIU Country Profiles.



## Non-bank financial institutions Index, 1990-2004

1 Little progress.  
 2 Formation of securities exchanges, market-makers and brokers; some trading in government paper and/or securities; rudimentary legal and regulatory framework for the issuance and trading of securities.  
 3 Substantial issuance of securities by private enterprises; establishment of independent share registries, secure clearance and settlement procedures, and some protection of minority shareholders; emergence of non-bank financial institutions (for example, investment funds, private insurance and pension funds, leasing companies) and associated regulatory framework.  
 4 Securities laws and regulations approaching IOSCO standards; substantial market liquidity and capitalisation; well-functioning non-bank financial institutions and effective regulation.  
 4+ Standards and performance norms of advanced industrial economies: full convergence of securities laws and regulations with IOSCO standards; fully developed non-bank intermediation.

### Algeria

Year	Description	EBRD Index	Change in Value
1990-1997	<ul style="list-style-type: none"> <li>• Trust Algeria, a joint-venture insurance company involving Bahraini and Qatari shareholders, began operations in July 1997.</li> </ul>	1	
1999	<ul style="list-style-type: none"> <li>• <i>Formation of securities exchange</i> - The Algiers stock exchange was officially opened on July 28th, 1999. Stock exchange was opened at the beginning of 1998 and the associated regulatory institutions for its operations.</li> </ul>	2-	1 to 2-
2004	<ul style="list-style-type: none"> <li>• The Algiers Stock Exchange remains tiny, and a brokerage network has yet to be established. There are still only three companies listed: Eriad-Setif, a food processing company; Saidal, a pharmaceutical company; and El Aurassi Hotel.</li> </ul>		

Sources: May 2004, IMF Country Report No. 04/138, *Algeria: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency and Banking Supervision*; EIU Country Profiles; IMF Country Reports.

### Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>• Until 1990, the Casablanca Stock Exchange (Bourse des valeurs de Casablanca ) has seen two reforms since it was inaugurated in 1929. Under the first, in 1948, the Securities exchange acquired legal personality. The second, in 1967, involved a legal and technical reorganisation, and a change in legal status to that of a public establishment.</li> </ul>	1+	
1993	<ul style="list-style-type: none"> <li>• The Casablanca stock market is underwent a third round of reforms designed to attract increased interest from overseas and local investors. The stock exchange is one of the few Middle Eastern bourses with no restrictions on foreign participation.</li> <li>• The government approved legislation to turn the bourse into a private company with stock held by brokers, to create new stock-trading bodies and to channel the funds of small savers into share issues and unit trusts.</li> <li>• A stockmarket regulator , the Conseil déontologique des valeurs mobilières (CDVM) was established (<a href="#">Dahir portant loi n° 1-93-212 of september 21st 1993 modified et completed by law 23-01</a>).</li> </ul>	2-	1+ to 2-

1997 1998	<ul style="list-style-type: none"> <li>• Stock market officials have begun a campaign to persuade more companies to obtain market listings in order to boost the current 46 companies and banks quoted.</li> <li>• <i>Growth in non-bank financial institutions.</i>- The mutual funds' assets under management soared to \$2.7bn in 1998, a 134.5% increase over the previous year.</li> </ul>	2	2- to 2
2003	<ul style="list-style-type: none"> <li>• At the end of 2003, three new laws were enforced concerning the stock market in Morocco. <ul style="list-style-type: none"> <li>- Amendment to the law n°1-93-212 (September 21st, 1993): Increases the powers of the "Conseil Déontologique des Valeurs Mobilières" (CDVM): control over the stock market, the right to lead inquiries and auditions, introduction of different levels of sanctions.</li> <li>- Amendment to the law n°1-93-211 (September 21st, 1993) : The Casablanca Stock Exchange ("Bourse de Casablanca") is reset into 5 categories. New indicators and data daily published (rates curve). Free commissions.</li> <li>- Public offers: The text aims at guaranteeing transparency information equality between shareholders. No legal text concerning public offers before this date.</li> </ul> </li> </ul>	2+	2 to 2+

Sources : Fiche de synthèse, *Le marché des actions marocain : bilan à fin 2003*, Actualisation à avril 2004, DREE-MINEFI/TRESOR, EIU Country Profiles, IMF Country Reports.

## Tunisia

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>• Bourse des valeurs mobilières (BVM), a semi-privatised stock exchange was opened in 1990.</li> </ul>	2-	
1994	<ul style="list-style-type: none"> <li>• <i>Establishment of independent share registries, secure clearance and settlement procedures.</i> The regulation of public offerings of securities and the role and responsibilities of the Financial Market Board (<i>Conseil du Marché Financier</i>--CMF), market intermediaries, the Tunisian Stock Exchange (<i>Bourse des Valeurs Mobilières de Tunisie</i>--BVMT), and the Tunisian Interprofessional Clearing Company and Securities Depository (<i>Socit Tunisienne Interprofessionnelle de Compensation et de Dpt de Valeurs Mobilières</i>--STICODEVAM) are defined in a single law passed in November 1994 (law 94-117 regulating securities operations).</li> </ul>	2	2- to 2
1996	<ul style="list-style-type: none"> <li>• There are also 86 investment funds (SICAFs) managing TD513m at the end of 1996. Risk capital funds (SICARs) were launched in 1996, and there were nine SICARs managing TD107m of funds at the end of that year.</li> </ul>		
1997	<ul style="list-style-type: none"> <li>• Lifting of the ceiling was lifted foreign ownership of quoted companies from 10% to 49.99%.</li> <li>• Of 20 insurance companies in total, 15 are Tunisian and five are foreign, including firms from France and Italy.</li> </ul>		

Sources: December 1998, IMF Staff Country Report No. 98/129, *Tunisia: Banking System Issues and Statistical Appendix*, [IMF Report on Observance of Standards and Codes: Tunisia](#), Jan 2001, IMF country reports.

## EBRD: Investment Climate Indices, 1990-2004

### EBRD index of Privatization, 1990-2004

#### Large Scale

<p>1 Little private ownership.</p> <p>2 Comprehensive scheme almost ready for implementation; some sales completed.</p> <p>3 More than 25 per cent of large-scale enterprise assets in private hands or in the process of being privatised (with the process having reached a stage at which the state has effectively ceded its ownership rights), but possibly with major unresolved issues regarding corporate governance.</p> <p>4 More than 50 per cent of state-owned enterprise and farm assets in private ownership and significant progress on corporate governance of these enterprises.</p> <p>4+ Standards and performance typical of advanced industrial economies: more than 75 per cent of enterprise assets in private ownership with effective corporate governance.</p>
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#### Small Scale

<p>1 Little progress.</p> <p>2 Substantial share privatised.</p> <p>3 Complete privatisation of small companies with tradable ownership rights.</p> <p>4+ Standards and performance typical of advanced industrial economies; no state ownership of small enterprises; effective tradability of land</p>
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#### Algeria

Year	Description	EBRD Index (Large Scale)	EBRD Index (Small Scale)
1993	<ul style="list-style-type: none"> <li>As of 1993, there were 1300 local public enterprises (EPL) and 400 national enterprises (large public enterprises). Another group of 12 companies sold imported food at subsidized prices.</li> </ul>	1	1
1995	<ul style="list-style-type: none"> <li>Algeria's privatization program was launched in 1995 with the passage of Law 95-22. The government has identified some 200-230 state companies for sale in whole or in part. The law allowed for 100% private ownership in most public enterprises.</li> </ul>	1+	1+
1996	<ul style="list-style-type: none"> <li>Thus far, only ten sales have been completed and most of these have been in the hotel sector. The next phase of the privatization programme focuses on 1,300 small and medium-sized firms, to be sold mainly through tender sales or worker and management buy-outs.</li> </ul>	1+	1+
1997-1998	<ul style="list-style-type: none"> <li>Sales completed in the past 21 months include those of 60 small state-owned enterprises, such as hotels and soft-drink concerns. By 1998, 877 were liquidated or sold which is more than 67 percent.</li> </ul>	1+	2+
2001	<ul style="list-style-type: none"> <li>The IMF notes that there has been "no real privatisation yet", save for the listing and sale on the stock exchange of 20% of the equity of three companies (Eriad-Setif, Soidal and El-Aurassi). According to government plans, 184 state-owned enterprises are to be partially or wholly sold off by end-2004.</li> </ul>	1+	2+
2004	<ul style="list-style-type: none"> <li>A comprehensive scheme for large-scale privatisation is far from being set up. The government announced in February 2002 that it would privatise, either fully or partially, 100 state-owned firms during the course of the year. These mostly comprised small companies in areas ranging from hotels to food-processing, although they also included the shipping firm SNTM and three medium-sized cement plants. Yet by September 2004 nothing had been sold, in a throwback to a previous privatization effort in 1998, when the government failed to sell any of 89 state-owned companies that it had planned to privatise as a result of strong opposition by powerful trade unions and confusion about who was in charge of the process.</li> </ul>	1+	2+

Sources : February 2004, IMF Country report No.04/31, *Algeria: selected issue and statistical appendix*; February 2005, IMF Country Report No. 05/50, *Algeria: 2004 Article IV Consultation—Staff Report; Public Information Notice on the Executive Board Discussion; and Statement by the Executive Director for Algeria*; EIU Country Profiles; IMF Country Reports.

## Morocco

<i>Year</i>	<i>Description</i>	<i>EBRD Index (Large Scale)</i>	<i>EBRD Index (Small Scale)</i>
1990	<ul style="list-style-type: none"> <li>Morocco's privatisation programme is one of the most advanced in the region, grossing Dh7.4bn (\$820m) of receipts by the end of 1995. First approved by parliament in 1989, it envisaged the divestment of 112 companies by 1996. Morocco is stated to have more than 600 SOE (which implies less than 20% of SOE).</li> </ul>	2-	1
1993	<ul style="list-style-type: none"> <li>Little progress was made until 1993, when the programme accelerated with the sale of shares in hotels, road transport, petroleum distribution, petrochemicals, housing, textiles and a major cement company. In 1993 the government sold 51% of its shares in the country's argest cement company, CimENTS de l'Oriental (Cior), to a subsidiary of Switzerland's Holderbank.</li> </ul>	2	1+
1994	<ul style="list-style-type: none"> <li>More divestments followed in 1994, when a further 27 enterprises were sold, including the important state holding company, Société nationale d'investissements (SNI), four more petroleum distribution companies, four commercial and industrial enterprises, and eight hotels.</li> </ul>	2+	1+
1996	<ul style="list-style-type: none"> <li>Only 49 companies were sold by the end of 1996, as differences of opinion emerged in the cabinet and slowed progress. In 1996 the government sold a 67% share in the Imiter silver mine to Omnium nord africain (ONA).</li> <li>The government's most advanced privatisation instruments to date were tested in 1996, when privatisation bonds were issued on the domestic market for the first time. The most successful formula developed for the larger privatisations has been to sell a substantial share (25-50%) of the business to a core group of strategic (usually foreign) investors, who pledge to bring in capital and technical expertise. Another tranche is then floated on the Casablanca stock exchange, with priority given to small local investors. Finally, a separate international placement aims to attract foreign institutional and private investors, with the government generally retaining a small stake.</li> </ul>	2+	1+
1997	<ul style="list-style-type: none"> <li>Sales continued in 1997 with the purchase of majority stakes in the country's two state oil refineries by a Saudi-owned Swedish-based company, Corral, for \$420m.</li> </ul>	2+	1+
1999	<ul style="list-style-type: none"> <li>Of the 114 state enterprises that were identified for privatisation in 1993, only 60 have been sold to date.</li> </ul>	2+	1+
2000	<ul style="list-style-type: none"> <li>In December 2000 a 35% stake in state-owned Maroc Télécom (MT) was sold to Vivendi-Universal of France for US\$2.2bn.</li> </ul>	3	1+
2003	<ul style="list-style-type: none"> <li>In the middle of the year the Franco-Spanish tobacco company, Altadis, paid Dh14.08bn (US\$1.49bn, or €1.28bn) for an 80% stake in state-owned tobacco firm Régie des tabacs (RDT).</li> </ul>	3	1+

Sources : Ministère des finances et de la privatisation , <http://www.finances.gov.ma/eep/Privatisations/privatisation.htm#> ; EIU Country Profiles; IMF Country Reports.

## Tunisia

<i>Year</i>	<i>Description</i>	<i>EBRD Index (Large Scale)</i>	<i>EBRD Index (Small Scale)</i>
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1990	<ul style="list-style-type: none"> <li>There was approximately (232+48)=280 SOE in 1987. In its first phase privatization involved the disposal of small, mostly loss-making firms in the tourism, transport, food and construction materials sectors.</li> </ul>	1	1
1994	<ul style="list-style-type: none"> <li>From 1987 to 1994 just 48 firms were sold for a total of TD195m (US\$134m at the rate prevailing in mid-September 2000). In 1994 the government sold 20% of the national carrier, Tunisair.</li> </ul>	1	1
1996	<ul style="list-style-type: none"> <li>The sale of state assets has been slowed by residual political resistance, fears that state companies might be sold too cheaply, and a wish to avoid mass sackings from overstuffed companies. Another obstacle has been that many public companies are in sectors, such as energy, which the government considers "strategic".</li> <li>By September 1996 some 60 out of around 200 public enterprises had been sold off. But most were small companies in the tourism and transport sectors, and many were loss-making, although the list also included 20% of the state carrier Tunis Air.</li> </ul>	1	1+
1997	<ul style="list-style-type: none"> <li>By September 1997 some 88 out of around 200 public enterprises had been sold off for a total of some \$360m.</li> </ul>	1	2-
1998	<ul style="list-style-type: none"> <li>By mid-1998 the government had privatized 95 mostly small firms in whole or in part, bringing in revenue of TD402m (\$359m).</li> </ul>	1	2-
2002	<ul style="list-style-type: none"> <li>Receipts rose to TD135m in 2002 from the sale of five firms, including TD103m from the divestment of a 52% stake in Union internationale de banques, and to TD475m if the TD340m from the first of two payments for the sale of a second GSM licence is included.</li> </ul>	2	2-
2003	<ul style="list-style-type: none"> <li>By the end of 2003 176 public enterprises had been fully or partially privatised (or shut down and their assets sold off), bringing in receipts of over TD2.4bn (US\$1.8bn), about TD1.75bn (73%) of it from foreign investors, mostly from the sale of cement plants and banks and telecoms concessions.</li> </ul>	2	3-

Sources: March 2000, IMF Country Report No. 00/37, *Tunisia: Recent Economic Development*; La privatisation en Tunisie: <http://www.tunisieinfo.com/privatisation/>; EIU Country Profiles; IMF Country Reports

## Governance and Enterprise Restructuring Index, 1990-2004

1 Soft budget constraints (lax credit and subsidy policies weakening financial discipline at the enterprise level); few other reforms to promote corporate governance.
2 Moderately tight credit and subsidy policy, but weak enforcement of bankruptcy legislation and little action taken to strengthen competition and corporate governance.
3 Significant and sustained actions to harden budget constraints and to promote corporate governance effectively (for example, privatisation combined with tight credit and subsidy policies and/or enforcement of bankruptcy legislation).
4 Substantial improvement in corporate governance and significant new investment at the enterprise level.
4+ Standards and performance typical of advanced industrial economies: effective corporate control exercised through domestic financial institutions and markets, fostering market-driven restructuring.

### Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li><i>Some reform efforts to promote corporate governance</i> - A new money and credit law was passed in March 1990, paving the way for international participation in Algeria's economic reconstruction. The law also sought to bring a new realism to the economy, introducing such concepts as public-sector bankruptcies.</li> </ul>	1+	
1998	<ul style="list-style-type: none"> <li>Economic reforms focused on restructuring public enterprises. More than half of the small local public enterprises were liquidated or privatized, while the public sector withdrew almost completely from distribution and importing activities.</li> </ul>	2-	1+ to 2-
2000	<ul style="list-style-type: none"> <li>The state power company, Sonelgaz, is to be restructured, with at least three new electricity companies, responsible for the production, transmission and distribution of power, to be created from the giant state utility.</li> </ul>	2-	n/a
2004	<ul style="list-style-type: none"> <li><i>soft budget constraints facing public enterprise</i> - after more than 10 years into the economic transition process to a market economy, Algeria still maintains a sizeable an inefficient state-owned enterprise sector. Continued financial support to public enterprise through directed credit has been the main factor of the fragility of the Algerian banking system. Between 1991 and 2002, the Treasury repeatedly bailed out the public banks to enable them to meet prudential ratios. On average, these interventions amounted to 4 percent of GDP per year over 1991-2002.</li> </ul>	2-	n/a

Sources: EIU Country Profiles ; IMF Country Reports ; Algeria-Watch, <http://www.algeria-watch.org/farticle/tribune/liberalisation.htm>; webpage on economic liberalization and privatizations in Algeria by Adel Abderrezak, Constantine University: <http://membres.lycos.fr/pstdz/10et11N1.pdf>; Une lecture économique de la crise algérienne », Jacques Ould Aoudia : <http://www.fen.fr/~marchand/LIEN/Lien%2035/LCA.html>

## Morocco

Year	Description	EBRD Index	Change in Value
1995	<ul style="list-style-type: none"> <li>• <i>Corporate restructuring</i> -The national carrier, Royal Air Maroc (RAM), is being restructured in preparation for privatisation. In 1995 the government confirmed that the airline's monopoly would be dismantled in favour of an open-skies policy.</li> </ul>	1+	1 to 1+
1997	<ul style="list-style-type: none"> <li>• The legal basis for private sector development was further strengthened by amendments to the corporate laws and bankruptcy procedures.</li> </ul>	2-	1+ to 2-
2002	<ul style="list-style-type: none"> <li>• <i>Improvements in corporate governance</i> - The IMF notes that governance issues have come to the forefront as a result of the authorities efforts to disclose 2 major financial scandals – one concerning two government banks (CNCA and CIH) and the other social security institution that cover private sector employees (CNSS). Acting forcefully and in a transparent manner against those involved has provided a clear departure from past practices and help to improve the climate for private-sector activity.</li> </ul>		
2003	<ul style="list-style-type: none"> <li>• A World Bank 2003 report has states that the inefficiency of the judicial system is holding back economic development. The report said that the courts move too slowly in dealing with cases, bankruptcy protection and liquidation procedures are inefficient and the courts often fail to enforce legal rulings.</li> </ul>	2	2- to 2

Sources : EIU Country Profiles, 96-2005, IMF Country Reports and PIN, 1996-2005.

## Tunisia

Year	Description	EBRD Index	Change in Value
1996	<ul style="list-style-type: none"> <li>• <i>Tighter credit and subsidy policy</i>. By September 1996 some 60 out of around 200 public enterprises had been sold off. But most were small companies in the tourism and transport sectors, and many were loss-making, although the list also included 20% of the state carrier Tunis Air. An industrial restructuring program (Le Programme de Mise à Niveau ) was launched to prepare private manufacturing enterprise for market liberalization and European competition.</li> </ul>	2	1 to 2
2002	<ul style="list-style-type: none"> <li>• By the end of 2003, 176 public enterprises had been fully or partially privatised (or shut down and their assets sold off).</li> </ul>	2+	2 to 2+

Sources: C.A.I.M.E.D., *Politiques pour les entreprises dans la Région Méditerranéenne – Tunisie* : [unpan1.un.org/intradoc/groups/public/documents/CAIMED/UNPAN018863.pdf](http://unpan1.un.org/intradoc/groups/public/documents/CAIMED/UNPAN018863.pdf) ; <http://www.tunisieinfo.com/privatisation/>; Ministerial website, *Ministère du transport, Principales réalisations et perspectives d'avenir* : <http://www.ministeres.tn/html/ministeres/realisations/transport.html>; EU Commission, *Politique européenne de voisinage, Rapport sur la TUNISIE*, May 12th, 2004 ; EIU Country Profiles, 96-2005 ; IMF Country Reports and PIN, 1996-2005.

## EBRD index of price liberalisation, 1990-2004

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| <p>1 Most prices formally controlled by the government.<br/>                 2 Some lifting of price administration; state procurement at non-market prices for the majority of product categories.<br/>                 3 Significant progress on price liberalisation, but state procurement at non-market prices remains substantial.<br/>                 4 Comprehensive price liberalisation; state procurement at non-market prices largely phased out; only a small number of administered prices remain.<br/>                 4+ Standards and performance typical of advanced industrial economies: complete price liberalisation with no price control outside housing, transport and natural monopolies.</p> |
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## Algeria

Year	Description	EBRD	Change
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		<i>Index</i>	<i>in Value</i>
1990	<ul style="list-style-type: none"> <li>Price liberalization started with law 89 - 12 (July 5<sup>th</sup>, 1989) which defined a new price policy in Algeria.</li> </ul>	2	
1992-1995	<ul style="list-style-type: none"> <li>The Belaïd Abdesslam government and its “war economy programme” enforced a social netting (or social safety net) through subsidies to families in need to compensate consequences of price liberalization of some food products on purchasing power.</li> <li>The government’s efforts to cut subsidies helped fuel inflation up to around 30% in 1994 and 1995</li> </ul>	2+	2 to 2+
1997	<ul style="list-style-type: none"> <li>With a few exceptions, domestic prices have been freed, and generalized food subsidies eliminated. Subsidies are still in place for production inputs such as cereal and gas.</li> </ul>	3-	2+ to 3-

Sources: EIU Country Profiles ; IMF Country Reports ; Algeria-Watch, <http://www.algeria-watch.org/farticle/tribune/liberalisation.htm>; webpage on economic liberalization and privatizations in Algeria by Adel Abderrezak, Constantine University: <http://membres.lycos.fr/pstdz/10et11N1.pdf>; « Une lecture économique de la crise algérienne », Jacques Ould Aoudia : <http://www.fen.fr/~marchand/LIEN/Lien%2035/LCA.html>

## Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>The move towards price liberalization started in 1980's. This was a product of the 1980 structural adjustment plan. Price of bran was liberalized in 1988 for instance.</li> </ul>	2	
1996	<ul style="list-style-type: none"> <li><i>Further lifting of price control though state procures at non-market price for agriculture.</i> Government controls on prices are being gradually phased out, and now apply to only a few products such as some basic foods, health products and some educational materials. Agricultural wholesale and farm-gate prices are controlled in order to protect rural incomes and influence production patterns.</li> </ul>	2+	2 to 2+
2001	<ul style="list-style-type: none"> <li><i>Significant progress on price liberalization</i> -Title II of the law n°06-99 (that came into force in July 2001) sets down the principle of free prices. Prices of goods, products and services are to be determined by the free competition rules. 2 exceptions: the administration can intervene for economic reasons (structural reasons such as monopoly) or conjuncture reasons (such as a crisis). For some goods, free prices will occur after the transition period which ends at the end of 2006 (sugar, tobacco, water)</li> </ul>	3	2+ to 3

Sources : EIU Country Profiles ; IMF Country Reports ; Government website, *La compétitivité Economique du Maroc dans le nouveau contexte de libéralisation des échanges*, Janvier 1997 ; Economic Research, BNP-Paribas, *La trajectoire économique des pays du Maghreb*.

## Tunisia

Year	Description	EBRD Index	Change in Value
1991	<ul style="list-style-type: none"> <li>Price liberalization introduced in Tunisia with the law n° 91-64 (July 29<sup>th</sup>, 1991).</li> </ul>	1+	1 to 1+
1995	<ul style="list-style-type: none"> <li>At the start of 1995, 87% of prices were deregulated at the production level and 80.5% at the distribution level.</li> </ul>	3	1+ to 3
2002	<ul style="list-style-type: none"> <li>In mid-2002 19% of all prices were still administered by the state, a share that had not changed since 1997</li> </ul>		

Source : Mounir BAATOUR, *Le Droit de la concurrence Tunisien : doit-il être réformé ?* [www.fscpo.unict.it/EuroMed/Baatour.pdf](http://www.fscpo.unict.it/EuroMed/Baatour.pdf); EIU Country Profiles ; IMF Country Reports and PIN, 97 and 98.

## Index of trade and foreign exchange system, 1990-2004

1	Widespread import and/or export controls or very limited legitimate access to foreign exchange.
2	Some liberalisation of import and/or export controls; almost full current account convertibility in principle, but with a foreign exchange regime that is not fully transparent (possibly with multiple exchange rates).
3	Removal of almost all quantitative and administrative import and export restrictions; almost full current account convertibility.
4	Removal of all quantitative and administrative import and export restrictions (apart from agriculture) and all significant export tariffs; insignificant direct involvement in exports and imports by ministries and state-owned trading companies; no major non-uniformity of customs duties for non-agricultural goods and services; full and current account convertibility.
4+	Standards and performance norms of advanced industrial economies: removal of most tariff barriers; membership in WTO.



## Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>Much remains to be done to rid the Algeria's trade regime from anomalies and to improve the operating environment for the private sector. Most importantly, a range of exchange controls remain.. For example, 50% of all non-hydrocarbons export revenue must be surrendered by private exporters to Banque d'Algérie (the central bank)—all hydrocarbons export revenue must be given up. Individuals can buy foreign exchange, but are still not allowed to borrow in it. The supplementary budget of August 1990 granted businesses and individuals the right to hold foreign currency accounts.</li> </ul>	1	
1994	<ul style="list-style-type: none"> <li>In September 1994 the central bank introduced weekly fixing sessions at which local commercial banks could purchase hard currency, paving the way for the introduction of full convertibility. Local importers may now freely purchase goods abroad, bidding for hard currency in the local banking system, which so far has been able to meet demand.</li> </ul>	2-	1 to 2-
2001	<ul style="list-style-type: none"> <li>In August 2001, the government moved to reduce and simplify its tariff regime. Consequently, the top tariff, which will apply to most goods, has been reduced to 30% from 40%. There are, in addition, two further rates: a "reduced rate" of 5% and an "intermediate rate" of 15%; certain categories of goods will not be subject to any tariff.</li> </ul>	2	2- to 2
2002	<ul style="list-style-type: none"> <li>The EU Association Agreement, was ratified in April 2002. It implies free trade between Algeria and the countries of the EU, to be in place by 2014 (12 years after the accord's ratification). During this transitional period import duties on EU industrial products will be gradually removed (25% following ratification of the treaty, 40% after a seven-year period, and the balance after 12 years).</li> </ul>	2+	2 to 2+

Sources: February 2005, IMF Country Report No. 05/52, *Algeria: Selected Issues*; May 2004, IMF Country Report No. 04/138, *Algeria: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency and Banking Supervision*; EIU Country Profiles; IMF Country Reports.

## Morocco

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>Morocco has, since the early 1980s, been gradually implementing a programme of import liberalisation and in 1985 abolished the listed import scheme, under which virtually all imports required a specific licence. The list of prohibited items has now been reduced to a handful of products</li> </ul>	1	
1991	<ul style="list-style-type: none"> <li>A new foreign trade code was approved by parliament in 1991, limiting the scope for state intervention and simplifying regulations.</li> </ul>	1+	1 to 1+
1993	<ul style="list-style-type: none"> <li>Since 1993 the dirham has been convertible for current-account transactions, but capital movements remain restricted.</li> </ul>		
1995	<ul style="list-style-type: none"> <li>In January 1st 1995, Morocco became a WTO member.</li> <li>Customs duties were restructured in line with World Trade Organization commitments to trade liberalisation. Customs duties were simplified in 1985 and again in 1995, when the number of bands was reduced to six (2.5%, 10%, 17.5%, 25%, 35% and 45%) from the previous eight bands (ranging from 0-45%). A minimum rate of 2.5% now applies. However tariffs remain high</li> </ul>	2	1+ to 2
1997	<ul style="list-style-type: none"> <li>In 1997 the four-nation European Free-Trade Association (EFTA—which covers Iceland, Liechtenstein, Norway and Switzerland) initialled a free-trade agreement with Morocco. The accord envisages the elimination of duties over a 12-year transition period from January 1998.</li> </ul>	2+	2 to 2+
2000	<ul style="list-style-type: none"> <li>The Association Accord with the EU comes into force. The accord, one of several the EU has signed with its Mediterranean partners—including separate agreements on fisheries—will lead to free trade in industrial goods, with Morocco gradually dismantling tariffs and customs duties on industrial imports from the EU over a 12-year period (up to 2012), which started on March 1st 2000. Tariffs on capital goods imported from the EU were eliminated from 2000.</li> </ul>	3-	2+ to 3+
2002	<ul style="list-style-type: none"> <li>In 2002, Moroccan authorities eliminated the use of reference prices as recommended by the WTO. As a result, Morocco's rating in the trade restrictiveness index of the IMF changed from 8 to 5.</li> </ul>		

2003	<ul style="list-style-type: none"> <li>• Morocco has been steadily implementing the terms of the Association Accord with the EU since it came into force on March 1st 2000. Tariffs on raw materials, spare parts and products without a local equivalent were removed in four stages up to 2003. From 2003 tariffs on imported goods that have a local equivalent began to be removed at a rate of 10 percentage points a year.</li> <li>• To protect local manufacturers, the government has maintained significant trade barriers. Although 97% of imports do not require prior licensing, and average tariff rates declined from 35.9% in 2000 to 26.5% in 2003, high top marginal tariff rates and non-tariff barriers continue to protect domestic markets.</li> </ul>	3-	n/a
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Sources : Fiche de synthèse, *Le secteur des fruits et légumes frais au Maroc*, 20 avril 2004, MINEFI-DREE/TRESOR ; Fiche de synthèse, *Le marché des produits laitiers au Maroc*, Actualisation au 22 juin 2004 MINEFI-DREE/TRESOR ; Fiche de synthèse, *Le régime des importations au Maroc*, Actualisation au 29 mars 2004, MINEFI-DREE/TRESOR ; EIU Country Report ; IMF Country Reports, PIN 1999

## Tunisia

Year	Description	EBRD Index	Change in Value
1993	<ul style="list-style-type: none"> <li>• The government scrapped exchange controls from January 1993, making the dinar convertible for foreign investors, thus ending the need for them to seek authorisation from the Banque Centrale de Tunisie (BCT, the central bank) for all current-account transactions and for the repatriation of capital or profits.</li> </ul>	1+	1 to 1+
1994	<ul style="list-style-type: none"> <li>• Law n° 94-41 (March 7<sup>th</sup> 1994) was the end of the import licences system and introduced a significant liberalisation of imports.</li> <li>• In March 1994 an inter-bank foreign exchange market was opened, allowing banks to trade foreign currency at more flexible rates.</li> </ul>	2	1+ to 2
1995	<ul style="list-style-type: none"> <li>• In July 1995 a 1976 cooperation agreement with the EU was replaced by a much wider-ranging Association Agreement. Under the agreement, Tunisian tariffs on European industrial exports will be dismantled over a 12-year period, which began on January 1, 1996, with capital and intermediate goods, and will be extended by 2000 to cover most consumer goods. Tariffs on goods which are produced uncompetitively in Tunisia (around 30% of the total) will be lifted over seven years beginning in 2000.</li> </ul>	2	n/a
1996	<ul style="list-style-type: none"> <li>• Significant trade barriers remain to non-EU products. Although 97% of imports do not require prior licensing, maximum tariff rates on a wide range of imports were raised from 40% to 250% in 1996. The government also uses non-tariff barriers to block imports, especially of non-capital goods.</li> </ul>	2	n/a
1997	<ul style="list-style-type: none"> <li>• In May 1997 the government allowed banks to trade foreign currencies with foreign financial institutions. Banks were also freed to enter the forward foreign-exchange market, although transactions are limited to 12 months for imports and nine months for exports.</li> </ul>	2+	2 to 2+
2000	<ul style="list-style-type: none"> <li>• The Association Accord with the EU comes into force.</li> </ul>	3-	2+ to 3-
2003-2004	<ul style="list-style-type: none"> <li>• The government has undertaken a number of measures to boost exports by cutting the red tape hampering exporters. The measures include abolishing export duty, increasing the duration of export licences, simplifying paperwork, streamlining customs procedures and giving exporters better access to credit.</li> </ul>	3-	n/a

Sources: Fiche de synthèse, *Modalités de paiement des importations en Tunisie*, MINEFI-DREE/TRESOR.; Fiche de synthèse, *Le régime des importations en Tunisie*, Actualisation au 30 août 2004, MINEFI-DREE/TRESOR. ; EIU Country Profiles ; IMF Country Reports.

## Competition policy, 1990-2004

1 Little progress in commercialisation and regulation. Minimal private sector involvement and strong political interference in management decisions. Low tariffs, with extensive cross subsidisation. Liberalisation not envisaged, even for mobile telephony and value-added services.

2 Modest progress in commercialisation. Corporatisation of dominant operator and some separation from public sector governance, but tariffs are still politically set.

3 Substantial progress in commercialisation and regulation. Telecommunications and postal services fully separated, and cross-subsidies reduced. Considerable liberalisation in the mobile segment and in value-added services.

4 Complete commercialisation, including privatisation of the dominant operator, and comprehensive regulatory and institutional reforms. Extensive liberalisation of entry.

4+ Effective regulation through an independent entity. Coherent regulatory and institutional framework to deal with tariffs, interconnection rules, licensing, concession fees and spectrum allocation. Consumer ombudsman function.

### Algeria

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>97 percent of businesses that employ fewer than 100 persons are typically opaque family-owned enterprises in the construction, trade and service sectors and more than half were created under the command economy.</li> </ul>	1	
2002	<ul style="list-style-type: none"> <li><i>Reduction on entry restrictions</i> - In January 2002 parliament passed an electricity and gas law, which ends the monopoly of the state firm, Sonelgaz, over the domestic power and gas markets. The law has cleared the way for liberalisation of the sector over the next three years, through opening electricity generation to full private competition.</li> </ul>	2-	1 to 2-
2003	<ul style="list-style-type: none"> <li><i>Competition policy legislation</i> - New ordinances issued in 2003 cover (i) international trade; (ii) the organization of free trade zones; (iii) various aspects of the protection of intellectual property in trade transactions; and (iv) competition. This was part of the modernization of the legislative framework in line with WTO rules, while pursuing negotiations towards Algeria's WTO accession.</li> </ul>	2-	n/a

Sources: February 2005 IMF Country Report No. 05/68, *Algeria: Report on the Observance of Standards and Codes— Fiscal Transparency Modul*; May 2004, IMF Country Report No. 04/138, *Algeria: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics: Monetary and Financial Policy Transparency and Banking Supervision*; IMF Country Reports, including No. 05/50

### Morocco

Year	Description	EBRD Index	Change in Value
1995	<ul style="list-style-type: none"> <li>The national carrier, Royal Air Maroc (RAM), is being restructured in preparation for privatisation. In 1995 the government confirmed that the airline's monopoly would be dismantled in favour of an open-skies policy.</li> </ul>	1+	1 to 1+
1996	<ul style="list-style-type: none"> <li><i>Competition legislation</i> - In 1996, a telecommunication law allowed for competition in all the segments of the market and set up an independent regulatory agency.</li> </ul>	2-	1+ to 2-
1999	<ul style="list-style-type: none"> <li><i>Competition legislation</i> - Law n°06-99 on freedom of prices and competition (came into force in July 6th 2001). - This law is in accordance to the principles of transparency and non-discrimination and loyalty of the WTO. - Art 6 of the law forbids illegal agreements and abuse of market power</li> </ul>	2	2- to 2

Sources : Fiche de synthèse, *Les télécommunications au Maroc*, Actualisation au 6 décembre 2004, MINEFI-DREE/TRESOR ; IMF Country Profiles.

### Tunisia

Year	Description	EBRD Index	Change in Value
1990	<ul style="list-style-type: none"> <li>For 30 years after independence in 1956 economic policy centered on state ownership and protection from competition. Since 1986 the economy has changed from one based mostly on state control to one based largely on market principles, albeit with significant government involvement in some areas.</li> </ul>	1	
1991	<ul style="list-style-type: none"> <li><i>Competition legislation</i> introduced in Tunisia with the law n° 91-64 (July 29<sup>th</sup>, 1991). Introduced freedom of trade and industry. The law also forbids commercial arrangements (that limits competition). A competition commission was instituted to make sure the law is applied. The commission appeared to be under the Trade ministry authority.</li> </ul>	2-	1 to 2-
1994	<ul style="list-style-type: none"> <li><i>Competition policy legislation in banking</i>- Legislation to increase competition, improve efficiency and bring the banking sector in line with international banking</li> </ul>	2-	n/a

<p>1995</p> <p>1999</p> <p>2003</p>	<p>norms was introduced in February 1994. The law sought to increase competition by allowing all banks to take on commercial, development and offshore functions; however, most have preferred to remain in their own niche markets.</p> <ul style="list-style-type: none"> <li>• The Code d'investissement unique was introduced in 1994, simplifying investment regulations for most sectors and offering fiscal incentives to investment. Investment procedures have been streamlined and all formalities can, in theory, be dealt with in one office, the <i>guichet unique</i>.</li> <li>• In order to improve the competition commission's autonomy and credibility, a new law was enforced in 1995 (Law of April 24<sup>th</sup>, 1995) and the Commission was renamed "Competition Council". It is a legal institution.</li> <li>• Law of May 10<sup>th</sup>, 1999 went to improve the Competition Council organisation. The law introduced a preliminary mechanism of control of concentrations.</li> </ul> <p><i>Lax enforcement</i> - Few matters has been submitted to the "Competition Council" between 1995 and 2003 (about 40 times whereas more than 3000 breaches to the law are recorded each year).</p>	<p>2</p>	<p>2- to 2</p>
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Sources : C.A.I.MED, *Politiques pour les entreprises dans la Région Méditerranéenne – Tunisie*, [unpan1.un.org/intradoc/groups/public/documents/CAIMED/UNPAN018863.pdf](http://unpan1.un.org/intradoc/groups/public/documents/CAIMED/UNPAN018863.pdf) ; Mounir BAATOUR, *Le Droit de la concurrence Tunisien : doit-il être réformé ?*, [www.fscpo.unict.it/EuroMed/Baatour.pdf](http://www.fscpo.unict.it/EuroMed/Baatour.pdf); EIU Country Profiles ; IMF Country Reports.

## STATISTICAL APPENDIX

### A. Annex to Chapter 1:

**Table A.1.1 Maghreb vs. comparators: regional market size, 1980-2004**

region	share of World GDP (constant 2000 PPP), (in percent)		share of World GDP (constant 2000 USD), (in percent)		share of World population (%)	
	1980	2004	1980	2004	1980	2004
	ASEAN5	2.46	3.41	0.96	1.55	5.79
CEE	0.44	1.74	0.22	1.00	1.43	1.04
EU15	25.00	19.37	28.53	24.15	8.01	6.03
MGB	0.77	0.74	0.35	0.36	1.00	1.13
NAFTA	25.76	24.11	33.39	34.67	7.21	6.75

NAFTA=United States, Canada, Mexico; MGB= Algeria, Morocco, Tunisia); CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republics, , Slovenia); ASEAN 5= Malaysia, Thailand, Indonesia, Philippines and Singapore; EU-15=Spain, France, Belgium, Germany, Denmark, Greece, Ireland, Italy, Luxembourg, Netherlands, Austria, Portugal, Finland, Sweden and United Kingdom. Source: World Development Indicators, 2005.

**Table A.1.2 Overview of Trade Aspects of Maghreb Countries, 2004**

Countries	WTO status	Population (millions)	GDP (US\$ millions)	GDP per capita (US\$)	Goods and services (US\$ millions)		Trade openness ratio (percent)	Total Export Share (percent)	
					Exports	Imports		Oil	Non-oil
Algeria	no	32.4	84649.0	2616.0	34070.2	21814.0	66.0	92.4	7.6
Tunisia	1990	9.9	28184.7	2837.6	13308.3	14099.1	92.5	7.0	93.0
Morocco	1987	29.8	50030.8	1677.5	16632.2	19859.8	72.4	2.7	97.3

Source: World Development Indicators, UN Comtrade, World Economic Outlook, 2005. Note: trade balance is the ratio of the sum of imports and exports to GDP

**Table A.1.3 Maghreb vs comparators: Service Exports (1993-2004)**

	service exports % of total exports		transport (% of service exports)		travel (% of service exports)		other (% of service exports)	
	1993	2004	1993	2004	1993	2004	1993	2004
MGB	23.7	23.9	14.3	13.5	40.1	37.6	45.6	48.9
CEE	25.0	14.4	26.6	20.5	30.2	34.5	43.2	45.0
EU15	25.7	30.6	22.0	20.9	31.5	25.0	46.5	54.1
ASEAN5	19.3	14.4	12.2	15.8	50.6	32.3	37.2	52.0
NAFTA	20.9	17.6	17.1	14.7	28.0	25.5	51.1	58.4

Source: WDI, 2005.

**Table A.1.4 Maghreb vs. comparators: Service Imports (1993-2004)**

	service imports % of total imports		transport (% of service imports)		travel (% of service imports)		other (% of service imports)	
	1993	2004	1993	2004	1993	2004	1993	2004
MGB	16.4	15.8	22.6	29.9	10.1	11.2	10.1	11.2
CEE	17.9	12.6	23.7	15.6	18.2	23.3	18.2	23.3
EU15	22.7	25.8	23.2	22.0	27.6	23.0	49.3	54.9
ASEAN5	18.0	18.9	39.9	27.9	15.9	14.1	44.2	58.0
NAFTA	18.5	15.4	26.7	19.4	38.1	28.9	35.2	51.7

Source: WDI, 2005.

**Table A.1.5 Maghreb vs. comparators: FDI stock to GDP (in percent)**

	MGB	CEE	EU15
1990	26.34356		16.4923
1995	32.67231	9.293433	21.35472
2000	31.07706	23.26072	35.77411
2004	44.24244	51.47004	62.46046

Source: WDI, 2005.

Note: CEE=Poland, Hungary, Czech and Slovak Republic, Slovenia.

**Table A.1.6 Maghreb: FDI stock to GDP (in percent)**

	Algeria	Morocco	Tunisia
1980	5.1	19.7	47.6
1985	3.9	18.3	55.5
1990	3.9	16.8	72.2
1995	4.1	23.4	80.3
2000	7.3	28.2	64.3
2004	11.4	45.0	77.8

Source: WDI, 2005.

**Table A.1.7: Direction of Maghreb Merchandise Export Trade, 1980-2004**

Period	Export Value (billions of USD)					Export Share (%)				
	1980-84	1985-89	1990-94	1995-99	2000-04	1980-84	1985-89	1990-94	1995-99	2000-04
Africa	0.1	0.0	0.0	0.0	0.0	0.40	0.18	0.05	0.01	0.00
Asia	0.0	0.0	0.0	0.0	0.0	0.14	0.09	0.04	0.00	0.00
EU	10.8	10.1	13.4	15.5	26.1	62.40	71.99	72.61	68.36	69.10
EE, USSR	0.0	0.0	0.0	0.0	0.1	0.17	0.24	0.07	0.06	0.34
MENA	0.2	0.4	1.0	0.9	1.3	1.42	3.12	5.28	4.23	3.43
Maghreb	0.1	0.2	0.4	0.3	0.5	0.44	1.48	2.35	1.57	1.21
United States	4.2	1.6	1.9	2.0	4.5	23.35	11.54	10.27	8.92	11.31
Others	2.1	1.8	2.2	4.2	6.1	12.12	12.83	11.68	18.40	15.83
<b>World</b>	<b>17.5</b>	<b>14.0</b>	<b>18.5</b>	<b>22.7</b>	<b>38.0</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: Author's calculation using IMF, Direction of Trade Statistics, 2005

**Table A.1.8: Direction of Maghreb Merchandise Import Trade, 1980-2004**

Period	Import Value (billions of USD)					Import Share (%)				
	1980-84	1985-89	1990-94	1995-99	2000-04	1980-84	1985-89	1990-94	1995-99	2000-04
Africa	0.0	0.0	0.0	0.0	0.0	0.08	0.21	0.19	0.06	0.00
Asia	0.0	0.0	0.0	0.0	0.0	0.07	0.24	0.12	0.02	0.00
European Union (EU)	11.7	10.4	14.3	17.2	23.2	64.70	64.91	64.34	62.55	63.59
Eastern Europe, USSR	0.2	0.1	0.1	0.0	0.0	1.15	0.88	0.39	0.13	0.08
MENA	1.0	0.7	1.4	1.4	2.3	5.52	4.47	6.51	5.33	6.28
Maghreb	0.1	0.2	0.5	0.3	0.5	0.51	1.42	2.15	1.24	1.38
United States	1.3	1.3	2.0	1.9	1.9	7.27	8.15	8.76	7.06	5.41
Others	3.8	3.4	4.4	6.8	9.1	21.19	21.15	19.69	24.86	24.64
<b>World</b>	<b>18.1</b>	<b>16.1</b>	<b>22.2</b>	<b>27.4</b>	<b>36.5</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>	<b>100.00</b>

Source: Author's calculations using IMF Direction of Trade Statistics, 1980-2004

**Table A.1.9: Maghreb Merchandise Trade with MENA, 1980-2004**

Period	(1900-84)	(1985-99)	(1990-94)	(1995-99)	(2000-04)	(1900-84)	(1985-99)	(1990-94)	(1995-99)	(2000-04)
	(intra-regional exports, in millions of USD)					(intra-regional imports, in millions of USD)				
MENA	245.5	436.4	972.6	941.4	1282.9	1009.4	716.0	1447.5	1448.0	2285.2
Maghreb	77.7	207.1	431.6	343.2	451.5	91.9	230.7	477.2	338.0	492.9
GCC	42.5	63.0	108.0	118.7	147.8	821.3	377.7	648.5	571.2	978.7
Selected Mashreq	29.7	31.5	75.1	105.9	275.3	71.8	51.1	165.6	264.4	394.3
Others	95.6	134.8	357.8	373.5	408.3	24.4	56.6	156.3	274.5	419.3
	(intra-regional exports, as percent of world exports)					(intra-regional imports, as percent of world imports)				
MENA	1.4	3.1	5.2	4.2	3.4	5.5	4.4	6.4	5.3	6.2
Maghreb	0.4	1.5	2.3	1.5	1.2	0.5	1.4	2.1	1.2	1.4
GCC	0.2	0.5	0.6	0.5	0.4	4.5	2.4	2.9	2.1	2.6
Selected Mashreq	0.2	0.2	0.4	0.5	0.7	0.4	0.3	0.7	1.0	1.0
Others	0.6	0.9	1.9	1.6	1.1	0.1	0.3	0.7	1.0	1.2
	(intra-regional exports, as percent of MENA exports)					(intra-regional imports, as percent of MENA imports)				
MENA	100.0	100.0	100.0	100.0	100.0	100.00	100.00	100.00	100.00	100.00
Maghreb	31.2	49.9	44.5	35.7	35.5	9.6	33.4	32.8	23.0	22.0
GCC	18.2	15.0	11.0	12.9	11.7	80.2	51.3	45.0	39.6	42.6
Selected Mashreq	12.8	7.6	7.7	11.1	20.8	7.6	7.3	11.4	18.3	16.6
Others	37.8	27.5	36.8	40.4	32.1	2.7	7.9	10.8	19.1	18.8

Source: IMF Direction of Trade Statistics

Note: Country groups are: *Maghreb* : Algeria, Morocco, Tunisia; *GCC* : Bahrain, Kuwait, Oman, Qatar, Saudi Arabic, UAE; *Selected Mashreq countries*: Egypt, Jordan, Lebanon, Syria; *Other countries*: Mauritania, Djibouti, Yemen

**Table A.1.10: Product Concentration and Diversification Indices**

Exporter	year	No. of products exports	Diversification Index	Concentration Index
Algeria	1980	43	0.48	0.82
	1990	87	0.63	0.57
	2004	106	0.71	0.63
Morocco	1980	100	0.51	0.32
	1990	148	0.61	0.16
	2004	180	0.66	0.16
Tunisia	1980	126	0.58	0.48
	1990	137	0.62	0.31
	2004	188	0.62	0.18
Maghreb Average	1980	90	0.53	0.54
	1990	137	0.62	0.31
	2004	158	0.66	0.32
CEE Average	-	218	0.43	0.08
	2004	224	0.42	0.11
EU15 Average	1980	222	0.41	0.10
	1990	226	0.40	0.10
	2004	230	0.37	0.11
ASEAN5 Average	1980	181	0.62	0.30
	1990	207	0.56	0.21
	2004	223	0.48	0.21
NAFTA Average	1980	225	0.44	0.07
	1990	227	0.41	0.17
	2004	233	0.33	0.11

Source: Authors' calculation based on UNCTAD Concentration Database.

**Table A.1.11: Product Composition of Maghreb's Intra-regional and Extra-Regional Exports**

reporter	year	Food & Live Animals (0)		Beverages & Tobacco (1)		Crude Materials (2)		Minerals & Fuels (3)		Animal & Vegetable Fat (4)		Chemicals and Material (5)		Manufactured Goods (6)		Machinery and Transport Equipment (7)		Misc. Manufactures (8)	
		MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW	MGB	ROW
Algeria	1990	0.1	0.2	0.1	0.2	0.6	0.2	85.9	96.7	0.0	0.0	1.6	0.6	8.2	1.2	3.4	0.8	0.1	0.1
	2000	0.5	0.1	0.0	0.0	0.6	0.2	84.9	97.4	0.0	0.0	4.3	1.6	8.8	0.4	0.5	0.2	0.3	0.1
	2004	0.9	0.1	0.0	0.0	1.4	0.3	76.0	97.6	0.0	0.0	6.8	1.3	14.3	0.4	0.1	0.1	0.4	0.0
Morocco	1990	16.0	25.3	0.0	0.1	10.7	16.6	6.9	3.1	0.0	1.1	10.7	19.8	37.3	8.7	13.1	4.8	5.3	20.5
	2000	8.5	21.4	0.0	0.1	17.9	9.3	17.7	3.3	0.0	0.1	16.4	12.0	32.4	6.5	4.3	11.1	2.8	36.1
	2004	14.5	18.0	0.0	0.2	10.0	8.6	9.2	1.3	3.8	0.9	24.5	15.2	25.5	6.7	6.2	14.4	6.2	34.6
Tunisia	1990	11.1	6.6	1.3	0.4	0.8	2.4	0.0	17.9	0.0	3.6	18.8	14.3	51.9	10.3	13.1	7.7	2.8	36.7
	2000	4.7	4.3	0.7	0.6	0.5	2.1	0.1	12.1	2.5	3.7	28.3	10.1	32.4	9.2	25.0	13.1	5.8	44.8
	2004	11.9	4.3	1.2	0.6	1.2	1.6	0.1	9.8	2.7	6.1	21.4	8.6	40.5	9.6	17.2	16.8	3.8	42.6

Source: Authors' calculation based on UN Comtrade using SITC Rev 2 at 1 digit level. MGB=share of intra-Maghreb trade (percent), ROW=share of rest of the world trade (in percent).

**Table A.1.12: Factor Intensity of Merchandise Exports, 1996 & 2004**

	Share of total exports (%)											
	1990				2004				Change, 1990-2004 (%)			
	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Natural resources	Unskilled labor	Capital-intensive	Skilled labor
Algeria	97.7	0.5	1.0	0.8	98.0	0.0	1.6	0.4	0.2	-95.4	58.9	-46.4
Morocco	49.5	24.9	22.8	2.9	31.4	35.9	29.2	3.5	-36.6	44.1	28.2	23.4
Tunisia	35.7	37.6	21.3	5.5	24.4	43.5	24.7	7.5	-31.7	15.6	16.1	36.5

Source: Authors' computation based on UN Comtrade.

**Table A.1.13: Factor Intensity of Merchandise Imports, 1996 & 2004.**

	Share of total imports (%)											
	1990				2004				Change, 1990-2004 (%)			
	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Natural resources	Unskilled labor	Capital-intensive	Skilled labor	Natural resources	Unskilled labor	Capital-intensive	Skilled labor
Algeria	33.5	2.9	41.6	22.0	27.8	4.2	42.3	25.6	-16.9	45.5	1.8	16.3
Morocco	40.5	10.1	31.7	17.7	33.1	16.0	31.7	19.2	-18.3	58.3	0.0	8.8
Tunisia	30.4	20.6	31.4	17.5	21.8	22.5	35.3	20.3	-28.3	9.3	12.4	16.0

Source: Authors' computation based on UN Comtrade.

**Table A.1.14 Maghreb: Share of Dynamic Products in Non-Oil Exports (%)**

	Annual Growth (%)	Non-oil Export Share(%)
1980	158.49	66.32
1990	150.42	39.21
2004	136.76	52.54

Source: Authors' computation based on UN Comtrade.

**Table A.1.15 Maghreb: Country Frequency for Dynamic Non-Oil Products**

	1980-89	1990-99	2000-2004
Algeria	15	27	35
Morocco	57	68	83
Tunisia	44	58	74
Maghreb	116	153	192

Source: Authors' computation based on UN Comtrade.

**Table A.1.16: Export Specialization Indices, 1990 and 2004**

	Tunisia				Algeria				Morocco			
	Maghreb		ROW		Maghreb		ROW		Maghreb		ROW	
	1990	2004	1990	2004	1990	2004	1990	2004	1990	2004	1990	2004
Food and live animals (0)	0.8	1.2	0.9	0.8	0.0	0.1	0.0	0.0	1.2	1.4	3.4	3.4
Beverages and tobacco (1)	2.8	4.1	0.7	0.6	0.2	0.0	0.2	0.0	0.0	0.1	0.1	0.3
Crude materials, inedible, except fuel (2)	0.2	0.4	0.5	0.5	0.1	0.5	0.0	0.1	2.1	3.4	3.6	2.7
Mineral fuels, lubricants and related materials (3)	0.0	0.0	2.2	1.2	22.6	14.5	11.8	12.4	1.8	1.8	0.4	0.6
Animal and vegetable oils, fats and waxes (4)	0.0	1.7	9.1	14.9	0.0	0.0	0.0	0.1	0.0	2.4	2.7	2.3
Chemicals and related products (5)	2.2	2.2	1.6	0.8	0.2	0.7	0.1	0.0	1.3	2.5	2.2	1.1
Manufactured goods classified chiefly by materials (6)	2.3	1.8	0.6	0.7	0.4	0.7	0.1	0.0	1.6	1.2	0.5	0.5
Machinery and transport equipment (7)	0.3	0.5	0.2	0.4	0.1	0.0	0.0	0.0	0.3	0.2	0.1	0.3
Miscellaneous manufactured articles (8)	0.5	0.4	2.8	3.5	0.0	0.0	0.0	0.0	1.0	0.7	1.6	2.8

Source: Authors' calculation using UN Comtrade with SITC Rev 2. at 1 digit level.



**Table A.1.17 Algeria: 30 Largest Exports to the World**

SITC	Product Description	Value of Exports (USD million)		Percent of total Exports (%)	
		1990	2004	1990	2004
3330	Petrol.oils & crude oils obt.from b	5385.4	17600.0	49.0	54.8
3413	Petroleum gases and other gaseous h	2040.0	6736.2	18.5	21.0
3414	Petroleum gases and other gaseous h	911.4	4258.6	8.3	13.3
3343	Gas oils	802.7		7.3	0.0
3344	Fuel oils,n.e.s.	722.4		6.6	0.0
3341	Motor spirit and other light oils	704.6		6.4	0.0
3342	Kerosene and other medium oils	37.3		0.3	0.0
6712	Pig iron,cast iron and spiegeleisen	34.0	17.9	0.3	0.1
6861	Zinc and zinc alloys,unwrought	27.9	25.4	0.3	0.1
1121	Wine of fresh grapes (including gra	23.1	4.5	0.2	0.0
5334	Varnishes and lacquers,distempers,w	20.9	0.0	0.2	0.0
7415	Air conditioning mach.self-containe	18.9	0.2	0.2	0.0
579	Fruit,fresh or dried, n.e.s.	17.2	14.6	0.2	0.0
3354	Petroleum bitumen,petrol.coke & bit	15.2		0.1	0.0
5225	Oth.inorg.bases & metallic oxid.,hy	13.5	104.7	0.1	0.3
7752	Household type refrigerators & food	12.5	0.0	0.1	0.0
6521	Cotton fabrics,woven,unbleached,not	12.4		0.1	0.0
7283	Mach.for sorting,screening,separati	12.1	0.0	0.1	0.0
5621	Mineral or chemical fertilizers,nit	9.9	39.6	0.1	0.1
6749	Other sheets and plates,of iron or	8.6	70.7	0.1	0.2
2713	Natural calcium phosphat.,natur.alu	8.5	18.3	0.1	0.1
5112	Cyclic hydrocarbons	7.9		0.1	0.0
6542	Fabrics,woven,contain.85% of wool/f	7.5		0.1	0.0
5121	Acyclic alcohols & their halogenate	7.3	18.6	0.1	0.1
6727	Iron or steel coils for re-rolling	6.5		0.1	0.0
7234	Construction and mining machinery,n	6.4		0.1	0.0
6522	Cotton fabrics,woven,bleach.merceri	6.3	0.5	0.1	0.0
7431	Air pumps,vacuum pumps & compressor	5.6	0.1	0.1	0.0
6531	Fabrics,woven of continuous synth.t	5.3		0.0	0.0
6330	Cork manufactures	5.1	11.8	0.0	0.0
Total Share (percent)				<b>99.1</b>	<b>90.1</b>

Source: Author's calculation based on UN COMTRADE.

**Table A.1.18 Algeria: 50 Largest Exports to the World**

SITC	Product Name	Exports to Maghreb (1990)		Exports to ROW (1990)		Exports to Maghreb (2004)		Exports to ROW (2004)		RCA Index	
		Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	1990	2004
3330	Petrol.oils & crude oils obt.from b	0.00	0.00	5385.39	48.91	0.00	0.00	17600.00	54.77	11.1	16.9
3413	Petroleum gases and other gaseous h	38.76	0.35	2001.28	18.18	158.15	0.49	6578.04	20.50	45.2	50.0
3414	Petroleum gases and other gaseous h	148.19	1.35	763.24	6.93	116.40	0.36	4142.22	12.91	28.3	15.9
3352	Mineral tars and products of their	0.00	0.00	0.58	0.01	0.00	0.00	250.06	0.78	0.1	8.5
5225	Oth.inorg.bases & metallic oxid.,hy	2.75	0.02	10.74	0.10	16.80	0.05	87.93	0.27	1.0	3.6
6749	Other sheets and plates,of iron or	0.63	0.01	7.98	0.07	40.54	0.13	30.11	0.09	0.3	0.6
2820	Waste and scrap metal of iron or st	0.06	0.00	0.57	0.01	0.47	0.00	63.29	0.20	0.0	0.7
5621	Mineral or chemical fertilizers,nit	0.00	0.00	9.89	0.09	7.36	0.02	32.28	0.10	0.9	1.4
6861	Zinc and zinc alloys,unwrought	14.17	0.13	13.75	0.12	5.92	0.02	19.52	0.06	2.4	1.4
5221	Chemical elements	0.20	0.00	2.17	0.02	0.09	0.00	24.37	0.08	0.3	1.0
2882	Other non-ferrous base metal waste	0.01	0.00	4.43	0.04	2.49	0.01	18.69	0.06	0.3	0.5
5121	Acyclic alcohols & their halogenate	0.00	0.00	7.31	0.07	0.00	0.00	18.58	0.06	0.4	0.3
2713	Natural calcium phosphat.,natur.alu	0.00	0.00	8.49	0.08	0.00	0.00	18.29	0.06	2.5	4.3
6712	Pig iron,cast iron and spiegeleisen	0.04	0.00	33.93	0.31	0.00	0.00	17.93	0.06	9.8	1.3
7915	Rail&tramway freight and maintenanc	0.00	0.00	3.03	0.03	0.00	0.00	17.39	0.05	1.1	1.8
0579	Fruit,fresh or dried, n.e.s.	0.22	0.00	16.94	0.15	0.24	0.00	14.33	0.04	0.9	0.3
6330	Cork manufactures	0.00	0.00	5.13	0.05	0.06	0.00	11.74	0.04	1.9	2.0
6115	Sheep and lamb skin leather	0.02	0.00	0.03	0.00	0.83	0.00	9.11	0.03	0.0	2.3
0360	Crustaceans and molluscs,fresh,chil	0.00	0.00	0.43	0.00	0.28	0.00	8.70	0.03	0.0	0.1
4249	Fixed vegetable oils,n.e.s	0.00	0.00	0.00	0.00	0.00	0.00	6.41	0.02		1.4
723	Cocoa butter and cocoa paste	0.00	0.00	0.00	0.00	0.00	0.00	5.31	0.02		0.5
7821	Motor vehicles for transport of goo	0.00	0.00	1.10	0.01	0.00	0.00	5.22	0.02	0.0	0.0
0223	Milk & cream,fresh,not concentrated	0.00	0.00	0.00	0.00	0.24	0.00	4.76	0.01		0.2
5622	Mineral or chemical fertilizers,pho	0.00	0.00	0.00	0.00	0.22	0.00	4.76	0.01		2.2
5232	Metallic salts and peroxy salts of i	0.00	0.00	0.00	0.00	0.00	0.00	4.98	0.02		0.2
3222	Other coal,whether/not pulverized,n	0.00	0.00	0.00	0.00	0.00	0.00	4.58	0.01		0.0
1121	Wine of fresh grapes (including gra	0.18	0.00	22.95	0.21	0.00	0.00	4.51	0.01	0.8	0.1
6725	Blooms,billets,slabs & sheet bars o	0.25	0.00	0.99	0.01	3.11	0.01	0.62	0.00	0.1	0.0
7831	Public-service type passenger motor	0.00	0.00	0.00	0.00	0.00	0.00	3.16	0.01		0.1
6252	Tyres,pneumat.,new,of a kind used o	0.00	0.00	0.00	0.00	0.00	0.00	2.98	0.01		0.1
4313	Fatty acids,acid oils,and residues	0.00	0.00	0.00	0.00	0.02	0.00	2.88	0.01		0.4
7239	Parts of the machinery of 723.41 to	0.00	0.00	0.32	0.00	0.05	0.00	2.77	0.01	0.0	0.0
6954	Interchangeable tools for hand & ma	0.01	0.00	0.00	0.00	0.00	0.00	2.73	0.01	0.0	0.0
7731	Insulated,elect.wire,cable,bars,str	0.00	0.00	0.05	0.00	0.01	0.00	2.66	0.01	0.0	0.0
6783	Other tubes and pipes,of iron or st	1.93	0.02	2.72	0.02	0.00	0.00	2.64	0.01	0.2	0.0
1110	Non alcoholic beverages,n.e.s.	0.00	0.00	0.00	0.00	0.04	0.00	2.50	0.01		0.1
6782	seamlesstubes and pipes;blanks fo	0.00	0.00	0.00	0.00	0.00	0.00	2.45	0.01	0.0	0.1
6744	Sheets & plates,rolled >4.75mm of i	0.00	0.00	1.44	0.01	0.00	0.00	2.45	0.01	0.1	0.0
548	Vegetable products,roots & tubers,f	0.10	0.00	0.04	0.00	0.47	0.00	1.97	0.01	0.0	0.5
8741	Surveying,hydrographic,compasses et	0.00	0.00	0.00	0.00	0.01	0.00	2.22	0.01		0.1
8922	Newspapers journals,periodicals	0.00	0.00	3.38	0.03	0.00	0.00	1.91	0.01	0.3	0.1
0460	Meal and flour of wheat and flour o	0.00	0.00	0.00	0.00	1.68	0.01	0.03	0.00		0.2
615	Molasses,whether or not decolourize	0.00	0.00	0.00	0.00	0.02	0.00	1.68	0.01		1.0
6421	Boxes,bags & oth.packing containers	0.00	0.00	0.36	0.00	0.82	0.00	0.81	0.00	0.0	0.0
2112	Calf skins,raw (fresh,salted,dried,	0.00	0.00	0.00	0.00	1.49	0.00	0.09	0.00		0.4
0545	Other fresh or chilled vegetables	0.00	0.00	0.02	0.00	0.00	0.00	1.55	0.00	0.0	0.0
6412	Printing paper & writing paper,in r	0.00	0.00	0.00	0.00	1.39	0.00	0.16	0.00		0.0
6960	Cutlery	0.02	0.00	0.32	0.00	0.04	0.00	1.48	0.00	0.0	0.1
7149	Parts of the engines & motors of 71	0.00	0.00	0.73	0.01	0.00	0.00	1.39	0.00	0.0	0.0
5222	Inorganic acids and oxygen compound	0.02	0.00	0.56	0.01	0.80	0.00	0.32	0.00	0.1	0.1
	<b>Total</b>	<b>207.55</b>	<b>1.88</b>	<b>8310.29</b>	<b>75.47</b>	<b>360.08</b>	<b>1.12</b>	<b>29044.56</b>	<b>90.44</b>		

Source: Authors' calculation based on UN Comtrade.

**Table A.1.19 Algeria: Exports to the Maghreb**

SITC	Product Name	Exports to Maghreb (1990)			Exports to Maghreb (2004)			RCA (Maghreb Market)		RCA (World Market)	
		Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	1990	2004	1990	2004
3413	Petroleum gases and other gaseous h	38.76	17.67	0.35	158.15	40.93	0.49	175.2	85.1	45.2	50.0
3414	Petroleum gases and other gaseous h	148.19	67.54	1.35	116.40	30.12	0.36	292.4	265.8	28.3	15.9
6749	Other sheets and plates,of iron or	0.63	0.29	0.01	40.54	10.49	0.13	4.1	90.3	0.3	0.6
5225	Oth.inorg.bases & metallic oxid.,hy	2.75	1.25	0.02	16.80	4.35	0.05	16.7	50.8	1.0	3.6
5621	Mineral or chemical fertilizers,nit	0.00	0.00	0.00	7.36	1.90	0.02	0.0	28.8	0.9	1.4
6861	Zinc and zinc alloys,unwrought	14.17	6.46	0.13	5.92	1.53	0.02	188.7	63.7	2.4	1.4
6725	Blooms,billets,slabs & sheet bars o	0.25	0.11	0.00	3.11	0.80	0.01	0.7	2.2	0.1	0.0
2882	Other non-ferrous base metal waste	0.01	0.00	0.00	2.49	0.64	0.01	1.7	157.5	0.3	0.5
0460	Meal and flour of wheat and flour o	0.00	0.00	0.00	1.68	0.44	0.01	0.0	50.3	0.0	0.2
2112	Calf skins,raw (fresh,salted,dried,	0.00	0.00	0.00	1.49	0.39	0.00	0.0	166.8	0.0	0.4
6412	Printing paper & writing paper,in r	0.00	0.00	0.00	1.39	0.36	0.00	0.0	60.0	0.0	0.0
6115	Sheep and lamb skin leather	0.02	0.01	0.00	0.83	0.21	0.00	1.0	14.6	0.0	2.3
6421	Boxes,bags & oth.packing containers	0.00	0.00	0.00	0.82	0.21	0.00	0.0	4.6	0.0	0.0
5222	Inorganic acids and oxygen compound	0.02	0.01	0.00	0.80	0.21	0.00	1.6	9.8	0.1	0.1
5822	Aminoplasts	0.00	0.00	0.00	0.74	0.19	0.00	0.0	28.6	0.0	0.1
8931	Art.for the conveyance or packing o	0.00	0.00	0.00	0.71	0.18	0.00	0.0	1.4	0.0	0.0
8122	Sinks,wash basins,bidets,water clos	0.00	0.00	0.00	0.70	0.18	0.00	0.0	8.4	0.9	0.1
6428	Art.of paper pulp,paper,paperboard,	0.00	0.00	0.00	0.69	0.18	0.00	0.0	2.4	0.0	0.0
6114	Leather of other bovine cattle and	0.00	0.00	0.00	0.65	0.17	0.00	0.0	0.9	0.0	0.0
0548	Vegetable products,roots & tubers,f	0.10	0.04	0.00	0.47	0.12	0.00	37.2	10.1	0.0	0.5
<b>Total</b>		<b>204.89</b>	<b>93.38</b>	<b>1.86</b>	<b>361.75</b>	<b>93.62</b>	<b>1.13</b>				

Source: Authors' calculation based on UN Comtrade.

**Table A.1.20 Morocco: 30 Largest Exports to the World**

SITC	Product Description	Value of Exports (USD million)		Percent of total Exports (%)	
		1990	2004	1990	2004
2713	Natural calcium phosphat.,natur.alu	437.0	421.0	10.3	4.2
5622	Mineral or chemical fertilizers,pho	390.3	106.2	9.2	1.1
5222	Inorganic acids and oxygen compound	348.2	715.6	8.2	7.2
360	Crustaceans and molluscs,fresh,chil	213.3	300.6	5.0	3.0
571	Oranges,mandarins,clementines and o	169.3	251.9	4.0	2.5
8423	Trousers,breeches etc.of textile fa	145.2	438.2	3.4	4.4
371	Fish,prepared or preserved,n.e.s. i	141.9	355.4	3.4	3.6
3341	Motor spirit and other light oils	125.5		3.0	0.0
341	Fish,fresh(live/dead)or chilled,exc	114.6	110.8	2.7	1.1
7763	Diodes,transistors and sim.semi-con	109.6	623.0	2.6	6.3
565	Vegetables,prepared or preserved,n.	106.7	130.3	2.5	1.3
8429	Other outer garments of textile fab	86.1	160.2	2.0	1.6
8510	Footwear	78.6	161.7	1.9	1.6
8441	Shirts,men's,of textile fabrics	75.7	138.9	1.8	1.4
8462	Under garments,knitted of cotton	66.3	268.9	1.6	2.7
8459	Other outer garments & clothing,kni	61.0	171.5	1.4	1.7
8439	Other outer garments of textile fab	54.9	598.9	1.3	6.0
6592	Carpets,carpeting and rugs,knotted	51.8	14.4	1.2	0.1
585	Juices;fruit & veget.(incl.grape mu	50.1	1.2	1.2	0.0
2517	Chemical wood pulp,soda or sulphate	49.9	40.5	1.2	0.4
8452	Dresses,skirts,suits etc,knitted or	49.3	30.2	1.2	0.3
342	Fish,frozen (excluding fillets)	48.4	31.4	1.1	0.3
6851	Lead and lead alloys,unwrought	48.1	17.5	1.1	0.2
544	Tomatoes,fresh or chilled	47.3	113.0	1.1	1.1
8451	Jerseys,pull-overs,twinsets,cardiga	46.0	210.7	1.1	2.1
8481	Art.of apparel & clothing accessori	44.5	27.7	1.1	0.3
4235	Olive oil	41.2	55.7	1.0	0.6
6513	Cotton yarn	35.6	11.8	0.8	0.1
8422	Suits,men's,of textile fabrics	33.0	47.0	0.8	0.5
2871	Copper ores & concentrates;copper m	32.0	7.8	0.8	0.1
Total Share (percent)				<b>78.0</b>	<b>56.1</b>

Source: Author's calculation based on UN COMTRADE.

**Table A.1.21 Morocco: 50 Largest Exports to the World**

SITC	Product Name	Exports to Maghreb (1990)		Exports to ROW (1990)		Exports to Maghreb (2004)		Exports to ROW (2004)		RCA Index	
		Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	1990	2004
5222	Inorganic acids and oxygen compound	0.00	0.00	348.18	8.27	3.86	0.04	711.73	7.22	115.1	123.9
7763	Diodes,transistors and sim.semi-con	0.00	0.00	109.56	2.60	0.00	0.00	623.01	6.32	11.4	13.5
8439	Other outer garments of textile fab	0.01	0.00	54.91	1.30	0.00	0.00	598.89	6.07	3.6	16.0
8423	Trousers,breeches etc.of textile fa	1.51	0.04	143.67	3.41	0.22	0.00	437.94	4.44	14.9	20.0
7731	Insulated,elect.wire,cable,bars,str	0.77	0.02	22.75	0.54	0.88	0.01	422.30	4.28	1.5	7.8
2713	Natural calcium phosphat.,natur.alu	0.00	0.00	437.00	10.37	0.00	0.00	420.97	4.27	340.2	318.8
0371	Fish,prepared or preserved,n.e.s. i	0.00	0.00	141.93	3.37	0.60	0.01	353.98	3.59	30.2	41.9
5629	Fertilizers,n.e.s.	0.00	0.00	20.76	0.49	0.00	0.00	325.14	3.30	6.2	49.9
0360	Crustaceans and molluscs,fresh,chil	0.00	0.00	213.27	5.06	0.00	0.00	300.56	3.05	16.1	16.0
8462	Under garments,knitted of cotton	0.00	0.00	66.28	1.57	0.01	0.00	268.92	2.73	6.4	9.1
0571	Oranges,mandarins,clementines and o	4.09	0.10	165.18	3.92	0.00	0.00	251.93	2.56	52.6	44.1
3352	Mineral tars and products of their	0.00	0.00	0.00	0.00	0.00	0.00	246.98	2.50		27.3
8451	Jerseys,pull-overs,twinsets,cardiga	0.00	0.00	45.96	1.09	0.00	0.00	210.67	2.14	2.9	6.4
8459	Other outer garments & clothing,kni	0.12	0.00	60.85	1.44	0.00	0.00	171.49	1.74	3.9	4.6
8465	Corsets,brassieres,suspendres and t	0.00	0.00	0.97	0.02	0.02	0.00	162.29	1.65	0.5	21.3
8463	Under garments,knitted,of synthetic	0.01	0.00	1.62	0.04	0.00	0.00	162.15	1.64	0.4	13.1
8510	Footwear	0.07	0.00	78.58	1.87	0.04	0.00	161.64	1.64	2.1	2.8
8431	Coats and jackets of textile fabric	0.00	0.00	4.74	0.11	0.00	0.00	160.55	1.63	0.9	15.0
8429	Other outer garments of textile fab	0.01	0.00	86.07	2.04	0.00	0.00	160.18	1.62	14.2	13.1
7721	Elect.app.such as switches,relays,f	0.28	0.01	9.34	0.22	0.00	0.00	155.23	1.57	0.3	1.4
8434	Skirts,women's,of textile fabrics	0.00	0.00	13.51	0.32	0.00	0.00	148.34	1.50	4.1	23.0
8441	Shirts,men's,of textile fabrics	0.00	0.00	75.70	1.80	0.00	0.00	138.91	1.41	10.2	12.1
0565	Vegetables,prepared or preserved,n.	0.00	0.00	106.74	2.53	0.05	0.00	130.24	1.32	20.4	12.6
0545	Other fresh or chilled vegetables	0.02	0.00	8.05	0.19	0.00	0.00	119.65	1.21	1.1	7.1
8435	Blouses of textile fabrics	0.00	0.00	7.89	0.19	0.00	0.00	116.58	1.18	1.2	13.2
0544	Tomatoes,fresh or chilled	0.00	0.00	47.33	1.12	0.00	0.00	112.95	1.15	18.3	21.7
0341	Fish,fresh(live/dead)or chilled,exc	0.00	0.00	114.63	2.72	0.00	0.00	110.85	1.12	18.8	11.2
5622	Mineral or chemical fertilizers,pho	0.00	0.00	390.29	9.26	0.00	0.00	106.24	1.08	321.3	152.3
6749	Other sheets and plates,of iron or	0.00	0.00	3.25	0.08	8.93	0.09	83.03	0.84	0.3	2.6
2820	Waste and scrap metal of iron or st	0.00	0.00	8.55	0.20	0.07	0.00	85.22	0.86	1.3	3.2
6123	Parts of footwear	0.01	0.00	17.01	0.40	0.01	0.00	67.78	0.69	4.2	10.3
6899	Base metals,n.e.s.and cermets,unwro	0.00	0.00	0.00	0.00	0.00	0.00	67.79	0.69		14.3
8433	Dresses,women's,of textile fabrics	0.00	0.00	2.36	0.06	0.00	0.00	64.13	0.65	0.8	16.3
4235	Olive oil	0.00	0.00	41.17	0.98	0.00	0.00	55.70	0.56	19.5	10.7
0579	Fruit,fresh or dried, n.e.s.	0.00	0.00	2.22	0.05	0.03	0.00	53.02	0.54	0.3	3.8
0240	Cheese and curd	0.00	0.00	0.02	0.00	0.20	0.00	48.38	0.49	0.0	2.6
2929	Other materials of vegetable origin	0.05	0.00	21.65	0.51	0.00	0.00	48.35	0.49	11.1	13.9
8422	Suits,men's,of textile fabrics	0.00	0.00	32.96	0.78	0.00	0.00	46.99	0.48	14.4	8.3
7849	Other parts & accessories of motor	2.77	0.07	22.36	0.53	0.34	0.00	44.99	0.46	0.2	0.2
2882	Other non-ferrous base metal waste	0.00	0.00	10.38	0.25	0.00	0.00	42.79	0.43	1.6	3.2
2517	Chemical wood pulp,soda or sulphate	8.90	0.21	41.04	0.97	6.25	0.06	34.23	0.35	3.2	2.2
2875	Zinc ores and concentrates	0.00	0.00	12.61	0.30	0.00	0.00	38.69	0.39	3.7	13.2
6342	Plywood consisting of sheets of woo	0.01	0.00	9.93	0.24	0.04	0.00	38.32	0.39	1.4	4.3
8424	Jackets,blazers of textile fabrics	0.01	0.00	11.75	0.28	0.00	0.00	37.62	0.38	3.3	8.8
6811	Silver,unwrought,unworked or semi-m	0.28	0.01	23.01	0.55	0.00	0.00	37.59	0.38	7.8	6.1
2919	Other materials of animal origin, n	0.00	0.00	4.53	0.11	0.00	0.00	35.01	0.36	1.6	7.1
0548	Vegetable products,roots & tubers,f	0.00	0.00	12.93	0.31	0.00	0.00	31.95	0.32	6.3	21.1
6522	Cotton fabrics,woven,bleach.merceri	0.69	0.02	5.29	0.13	0.10	0.00	31.63	0.32	0.4	1.1
0342	Fish,frozen (excluding fillets)	0.00	0.00	48.36	1.15	0.94	0.01	30.42	0.31	6.8	2.4
8452	Dresses,skirts,suits etc,knitted or	0.01	0.00	49.33	1.17	0.00	0.00	30.21	0.31	18.1	7.2
<b>Total</b>		<b>19.62</b>	<b>0.47</b>	<b>3156.47</b>	<b>74.93</b>	<b>22.59</b>	<b>0.23</b>	<b>8344.12</b>	<b>84.63</b>		

Source: Authors' calculation based on UN Comtrade.

**Table A.1.22 Morocco: Exports to the Maghreb**

SITC	Product Name	Exports to Maghreb (1990)			Exports to Maghreb (2004)			RCA (Maghreb Market)		RCA (World Market)	
		Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	1990	2004	1990	2004
6749	Other sheets and plates,of iron or	0.00	0.00	0.00	8.93	8.87	0.09	0.01	64.71	0.25	2.57
5542	Organic surface-active agents,n.e.s	0.01	0.01	0.00	7.93	7.88	0.08	0.18	90.34	0.47	0.83
2517	Chemical wood pulp,soda or sulphate	8.90	7.46	0.21	6.25	6.21	0.06	155.17	155.24	3.18	2.15
5417	Medicaments(including veterinary me	9.91	8.32	0.24	5.62	5.58	0.06	15.84	3.92	0.77	0.09
6851	Lead and lead alloys,unwrought	4.17	3.49	0.10	5.24	5.21	0.05	321.97	517.31	32.55	7.61
712	Extracts,essences/concent.of coffee	0.00	0.00	0.00	4.09	4.06	0.04	0.00	354.08	0.00	5.04
5222	Inorganic acids and oxygen compound	0.00	0.00	0.00	3.86	3.83	0.04	0.49	153.60	115.11	123.94
4236	Sunflower seed oil	0.00	0.00	0.00	3.75	3.73	0.04	0.00	37.13	0.00	5.33
2785	Quartz,mica,felspar,fluorspar,cryol	0.00	0.00	0.00	2.73	2.71	0.03	0.00	250.88	19.78	14.69
7810	Passenger motor cars,for transport	0.00	0.00	0.00	2.44	2.42	0.02	0.00	0.97	0.00	0.01
542	Beans,peas,lentils & other legumino	7.11	5.97	0.17	2.37	2.36	0.02	89.68	25.25	4.21	2.26
6732	Bars & rods,of iron/steel;hollow mi	0.01	0.01	0.00	2.36	2.34	0.02	0.03	3.73	0.00	0.29
6115	Sheep and lamb skin leather	0.11	0.09	0.00	1.91	1.90	0.02	13.14	109.71	0.95	6.52
5121	Acyclic alcohols & their halogenate	0.37	0.31	0.01	1.84	1.82	0.02	39.69	92.34	0.11	0.11
620	Sugar confectionery and other sugar	0.00	0.00	0.00	1.79	1.78	0.02	0.00	55.07	0.17	0.67
980	Edible products and preparations n.	5.23	4.39	0.12	1.47	1.46	0.01	169.51	12.50	0.54	0.49
6428	Art.of paper pulp,paper,paperboard,	0.00	0.00	0.00	1.41	1.40	0.01	0.00	16.22	0.03	0.25
8122	Sinks,wash basins,bidets,water clos	2.01	1.68	0.05	1.31	1.30	0.01	142.95	51.16	2.84	7.86
5834	Polyvinyl chloride	0.72	0.61	0.02	1.05	1.04	0.01	20.64	9.93	0.09	0.46
619	Other sugars;sugar syrups;artificia	0.05	0.04	0.00	1.04	1.03	0.01	16.62	97.32	0.06	0.48
5530	Perfumery,cosmetics and toilet prep	0.07	0.06	0.00	1.03	1.02	0.01	2.08	4.81	0.97	0.09
342	Fish,frozen (excluding fillets)	0.00	0.00	0.00	0.94	0.93	0.01	0.00	28.30	6.82	2.40
8471	Clothing accessories of textile fab	0.07	0.06	0.00	0.92	0.91	0.01	3.66	2.28	0.62	2.77
7731	Insulated,elect.wire,cable,bars,str	0.77	0.65	0.02	0.88	0.87	0.01	6.28	2.11	1.54	7.79
615	Molasses,whether or not decolourize	0.00	0.00	0.00	0.87	0.86	0.01	0.00	135.49	9.13	14.23
6746	Sheets & plates,rolled;thickness of	0.00	0.00	0.00	0.86	0.86	0.01	0.00	10.06	0.00	0.08
7643	Radiotelegraphic & radiotelephonic	0.00	0.00	0.00	0.81	0.80	0.01	0.00	1.02	0.04	0.01
6252	Tyres,pneumat.,new,of a kind used o	0.12	0.10	0.00	0.74	0.74	0.01	1.26	6.11	0.43	0.42
6638	Manufactures of asbestos; friction	0.74	0.62	0.02	0.71	0.70	0.01	78.60	106.60	2.18	3.18
8983	Gramophone records and sim.sound re	0.24	0.20	0.01	0.69	0.68	0.01	7.39	5.37	0.02	0.17
8211	Chairs and other seats and parts	0.00	0.00	0.00	0.68	0.68	0.01	0.00	10.43	0.09	0.25
6353	Builders' carpentry and joinery	0.01	0.01	0.00	0.67	0.66	0.01	0.24	8.24	0.10	0.17
8931	Art.for the conveyance or packing o	0.04	0.03	0.00	0.60	0.60	0.01	1.19	3.99	0.09	0.13
371	Fish,prepared or preserved,n.e.s. i	0.00	0.00	0.00	0.60	0.60	0.01	0.00	29.16	30.25	41.93
5416	Glycosides:glands or other organs &	0.01	0.01	0.00	0.55	0.54	0.01	0.20	5.10	0.03	0.21
6413	Kraft paper and paperboard,in rolls	0.00	0.00	0.00	0.54	0.54	0.01	0.00	4.38	0.00	0.09
5823	Alkyds and other polyesters	0.00	0.00	0.00	0.54	0.53	0.01	0.00	3.17	0.04	0.03
7781	Batteries and accumulators and part	0.00	0.00	0.00	0.53	0.53	0.01	0.00	8.41	0.03	0.05
5921	Starches,inulin and wheat gluten	0.19	0.16	0.00	0.50	0.49	0.01	49.27	77.54	0.24	0.32
8219	Other furniture and parts	0.00	0.00	0.00	0.50	0.49	0.01	0.03	3.05	0.08	0.49
8124	Lighting fixtures and fittings and	0.12	0.10	0.00	0.48	0.48	0.00	3.68	7.35	0.69	0.62
5419	Pharmaceutical goods,other than med	0.00	0.00	0.00	0.48	0.47	0.00	0.00	9.09	0.07	0.18
2789	Minerals,crude, n.e.s.	0.25	0.21	0.01	0.46	0.46	0.00	17.50	35.93	8.78	7.43
5836	Acrylic polymers,methacrylic polyme	0.02	0.02	0.00	0.41	0.41	0.00	1.54	9.35	0.01	0.06
484	Bakery products (e.g.,bread,biscuit	0.00	0.00	0.00	0.38	0.38	0.00	0.00	12.07	0.05	0.10
6632	Natural or artificial abrasive powd	0.55	0.46	0.01	0.37	0.37	0.00	116.76	32.58	1.05	1.32
488	Malt extract;prep.of flour etc,for	0.00	0.00	0.00	0.37	0.36	0.00	0.00	5.25	0.00	0.09
7849	Other parts & accessories of motor	2.77	2.32	0.07	0.34	0.34	0.00	4.78	0.39	0.24	0.19
5514	Mixtures of two or more odoriferous	0.91	0.77	0.02	0.31	0.31	0.00	24.94	3.48	0.34	0.03
7284	Mach.& appliances for spezialized p	0.06	0.05	0.00	0.31	0.30	0.00	0.19	0.52	0.04	0.02
<b>Total</b>		<b>45.54</b>	<b>38.20</b>	<b>1.08</b>	<b>85.45</b>	<b>84.87</b>	<b>0.87</b>				

Source: Authors' calculation based on UN Comtrade.

**Table A.1.23 Tunisia: 30 Largest Exports to the World**

SITC	Product Description	Value of Exports (USD million)		Percent of total Exports (%)	
		1990	2004	1990	2004
3330	Petrol.oils & crude oils	521.4	751.6	14.9	7.8
8423	Trousers,breeches etc.of textile fa	341.7	729.1	9.8	7.5
5622	Mineral or chemical fertilizers	245.5	156.5	7.0	1.6
8429	Other outer garments of textile fab	158.6	644.4	4.5	6.7
5222	Inorganic acids and oxygen compound	139.8	181.8	4.0	1.9
4235	Olive oil	121.2	578.5	3.5	6.0
8439	Other outer garments of textile fab	110.2	624.7	3.1	6.5
8459	Other outer garments & clothing,kni	95.3	147.4	2.7	1.5
360	Crustaceans and molluscs,fresh,chil	78.4	83.9	2.2	0.9
3341	Motor spirit and other light oils	76.1		2.2	0.0
8441	Shirts,men's,of textile fabrics	73.9	105.3	2.1	1.1
6612	Portland cement,ciment fondu,slag	67.1	43.3	1.9	0.4
8462	Under garments,knitted of cotton	61.2	227.8	1.7	2.4
7731	Insulated,elect.wire,cable,bars	58.6	405.2	1.7	4.2
8434	Skirts,women's,of textile fabrics	52.1	62.2	1.5	0.6
579	Fruit,fresh or dried, n.e.s.	51.5	94.1	1.5	1.0
6123	Parts of footwear	49.6	162.6	1.4	1.7
7721	Elect.app.such as switches,relays	48.6	413.9	1.4	4.3
6522	Cotton fabrics,woven,bleach	45.6	55.9	1.3	0.6
8431	Coats and jackets of textile fabric	45.3	55.2	1.3	0.6
5232	Metallic salts and peroxyalts	36.9	84.1	1.1	0.9
8452	Dresses,skirts,suits etc,knitted	34.2	9.1	1.0	0.1
5231	Metallic salts and peroxyalts of i	33.3	29.3	1.0	0.3
8465	Corsets,brassieres,suspendres	29.8	205.2	0.9	2.1
341	Fish,fresh(live/dead)or chilled	26.6	26.2	0.8	0.3
8510	Footwear	23.8	264.5	0.7	2.7
7849	Other parts & accessories of motor	22.3	160.6	0.6	1.7
8435	Blouses of textile fabrics	21.9	40.1	0.6	0.4
7788	Other elect.machinery and equipment	20.2	75.8	0.6	0.8
8842	Spectacles and spectacle frames	19.8	0.1	0.6	0.0
Total Share (percent)				<b>77.5</b>	<b>66.3</b>

Source: Author's calculation based on UN COMTRADE.

**Table A.1.24 Tunisia: 50 Largest Exports to the World**

SITC	Product Name	Exports to Maghreb (1990)		Exports to ROW (1990)		Exports to Maghreb (2004)		Exports to ROW (2004)		RCA Index	
		Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	Value (mils USD)	Share in Total Exports (%)	1990	2004
3330	Petrol.oils & crude oils obt.from b	0.00	0.00	521.40	14.98	0.00	0.00	751.60	7.76	3.4	2.4
8423	Trousers,breeches etc.of textile fa	0.00	0.00	341.72	9.82	0.00	0.00	729.10	7.53	42.5	33.9
8429	Other outer garments of textile fab	0.13	0.00	158.45	4.55	0.00	0.00	644.39	6.65	31.6	53.6
8439	Other outer garments of textile fab	0.00	0.00	110.15	3.17	0.07	0.00	624.68	6.45	8.8	17.0
4235	Olive oil	0.00	0.00	121.14	3.48	2.25	0.02	576.23	5.95	69.3	112.8
7721	Elect.app.such as switches,relays,f	0.30	0.01	48.35	1.39	2.08	0.02	411.81	4.25	1.7	3.9
7731	Insulated,elect.wire,cable,bars,str	1.30	0.04	57.30	1.65	0.20	0.00	405.02	4.18	4.6	7.6
5629	Fertilizers,n.e.s.	0.00	0.00	0.00	0.00	0.02	0.00	280.83	2.90		43.9
8510	Footwear	0.09	0.00	23.72	0.68	0.26	0.00	264.25	2.73	0.8	4.6
8462	Under garments,knitted of cotton	0.00	0.00	61.16	1.76	0.01	0.00	227.76	2.35	7.1	7.9
8465	Corsets,brassieres,suspendres and t	0.00	0.00	29.82	0.86	0.00	0.00	205.17	2.12	18.9	27.4
5222	Inorganic acids and oxxygen compound	0.00	0.00	139.77	4.02	3.14	0.03	178.63	1.84	55.9	32.1
8451	Jerseys,pull-overs,twinsets,cardiga	0.01	0.00	15.12	0.43	0.00	0.00	180.77	1.87	1.2	5.6
6123	Parts of footwear	0.02	0.00	49.57	1.42	0.03	0.00	162.52	1.68	14.7	25.1
7849	Other parts & accessories of motor	0.59	0.02	21.73	0.62	3.50	0.04	157.08	1.62	0.3	0.7
5622	Mineral or chemical fertilizers,pho	0.00	0.00	245.47	7.05	1.24	0.01	155.29	1.60	244.6	228.5
8459	Other outer garments & clothing,kni	0.00	0.00	95.31	2.74	0.01	0.00	147.34	1.52	7.3	4.1
8841	Lenses,prisms,mirrors,other optical	0.11	0.00	0.05	0.00	0.05	0.00	126.41	1.31	0.1	5.1
8441	Shirts,men's,of textile fabrics	0.00	0.00	73.78	2.12	0.00	0.00	105.29	1.09	12.1	9.3
8939	Miscellaneous art.of materials of d	0.60	0.02	3.55	0.10	1.74	0.02	100.87	1.04	0.2	1.8
0579	Fruit,fresh or dried, n.e.s.	0.70	0.02	50.79	1.46	10.56	0.11	83.53	0.86	8.9	6.8
8463	Under garments,knitted,of synthetic	0.00	0.00	9.42	0.27	0.04	0.00	90.48	0.93	3.1	7.5
5232	Metallic salts and peroxyalts of i	9.42	0.27	27.44	0.79	17.07	0.18	67.05	0.69	10.5	11.5
0360	Crustaceans and molluscs,fresh,chil	0.00	0.00	78.44	2.25	0.00	0.00	83.89	0.87	7.1	4.5
6589	Other made-up articles of textile m	0.00	0.00	5.89	0.17	0.35	0.00	83.48	0.86	3.7	10.5
7712	Other electric power machinery,part	0.00	0.00	15.33	0.44	0.03	0.00	77.88	0.80	1.9	2.2
7788	Other elect.machinery and equipment	0.05	0.00	20.11	0.58	0.07	0.00	75.71	0.78	1.0	1.0
8434	Skirts,women's,of textile fabrics	0.00	0.00	52.09	1.50	0.00	0.00	62.23	0.64	19.2	9.8
6584	Bed linen,table linen,toilet & kitc	0.01	0.00	3.39	0.10	0.05	0.00	57.09	0.59	0.6	3.6
6522	Cotton fabrics,woven,bleach.merceri	0.08	0.00	45.52	1.31	1.14	0.01	54.80	0.57	3.5	2.0
8431	Coats and jackets of textile fabric	0.00	0.00	45.33	1.30	0.00	0.00	55.23	0.57	10.6	5.2
7711	Transformers,electrical	0.63	0.02	8.43	0.24	0.61	0.01	54.53	0.56	2.4	4.5
8720	Medical instruments and appliances	0.10	0.00	0.20	0.01	0.21	0.00	51.46	0.53	0.0	1.0
7783	Electr.equip.for internal combustio	0.04	0.00	1.46	0.04	0.67	0.01	45.21	0.47	0.2	1.9
6612	Portland cement,ciment fondu,slag c	21.66	0.62	45.44	1.31	18.67	0.19	24.64	0.25	22.8	7.1
7722	Printed circuits and parts thereof	0.02	0.00	7.10	0.20	0.00	0.00	42.88	0.44	1.0	1.5
6624	Non-refract.ceramic bricks,tiles,pi	5.04	0.14	13.10	0.38	2.41	0.02	39.80	0.41	3.5	3.1
8435	Blouses of textile fabrics	0.00	0.00	21.94	0.63	0.00	0.00	40.12	0.41	4.0	4.6
6418	Paper & paperboard,impregnat.coat.s	0.04	0.00	0.35	0.01	1.30	0.01	37.26	0.38	0.0	1.7
6428	Art.of paper pulp,paper,paperboard,	0.06	0.00	0.38	0.01	5.33	0.06	30.89	0.32	0.1	2.2
7642	Microphones,loudspeakers,amplifiers	0.00	0.00	4.03	0.12	0.01	0.00	35.30	0.36	0.9	3.0
5231	Metallic salts and peroxyalts of i	1.14	0.03	32.16	0.92	1.52	0.02	27.75	0.29	13.7	6.4
6534	Fabrics,woven,of discontinuous synt	0.10	0.00	13.88	0.40	0.00	0.00	26.98	0.28	2.3	3.7
0483	Macaroni,spaghetti and similar prod	0.00	0.00	0.17	0.00	0.10	0.00	26.83	0.28	0.1	11.3
2882	Other non-ferrous base metal waste	0.00	0.00	6.47	0.19	0.00	0.00	26.74	0.28	1.2	2.0
8422	Suits,men's,of textile fabrics	0.00	0.00	0.79	0.02	0.00	0.00	26.60	0.27	0.4	4.8
8219	Other furniture and parts	0.00	0.00	4.58	0.13	0.24	0.00	25.98	0.27	0.2	0.5
0341	Fish,fresh(live/dead)or chilled,exc	0.00	0.00	26.65	0.77	0.00	0.00	26.17	0.27	5.3	2.7
8310	Travel goods,handbags,brief-cases,p	0.00	0.00	13.07	0.38	0.00	0.00	25.48	0.26	1.5	1.1
8433	Dresses,women's,of textile fabrics	0.00	0.00	17.16	0.49	0.00	0.00	24.96	0.26	7.5	6.5
	<b>Total</b>	<b>42.25</b>	<b>1.21</b>	<b>2688.67</b>	<b>77.26</b>	<b>75.00</b>	<b>0.77</b>	<b>7865.98</b>	<b>81.22</b>		

Source: Authors' calculation based on UN Comtrade.



**Table A.1.25 Tunisia: Exports to the Maghreb**

SITC	Product Name	Exports to Maghreb (1990)			Exports to Maghreb (2004)			RCA (Maghreb Market)		RCA (World Market)	
		Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	Value (mils USD)	Share of Regional Exports (%)	Share of Total Exports (%)	1990	2004	1990	2004
6612	Portland cement,ciment fondu,slag c	21.66	20.70	0.62	18.67	10.19	0.19	265.3	281.2	22.8	7.1
5232	Metallic salts and peroxy salts of i	9.42	9.00	0.27	17.07	9.32	0.18	257.9	277.7	10.5	11.5
0579	Fruit,fresh or dried, n.e.s.	0.70	0.67	0.02	10.56	5.76	0.11	206.6	257.5	8.9	6.8
6259	Other tyres,tyre cases,inner tubes	0.00	0.00	0.00	8.35	4.56	0.09	0.1	166.1	1.0	2.1
6770	Iron/steel wire/wheth/not coated, bu	2.00	1.91	0.06	8.04	4.39	0.08	76.4	140.2	0.9	1.6
6428	Art.of paper pulp,paper,paperboard,	0.06	0.06	0.00	5.33	2.91	0.06	5.5	62.3	0.1	2.2
0620	Sugar confectionery and other sugar	0.01	0.01	0.00	4.95	2.70	0.05	7.1	155.3	0.8	1.3
6251	Tyres,pneumatic,new,of a kind used	5.56	5.31	0.16	4.39	2.40	0.05	145.6	70.4	0.8	0.4
7781	Batteries and accumulators and part	0.44	0.42	0.01	3.80	2.07	0.04	17.8	61.3	0.2	0.6
7849	Other parts & accessories of motor	0.59	0.56	0.02	3.50	1.91	0.04	1.2	4.1	0.3	0.7
5222	Inorganic acids and oxygen compound	0.00	0.00	0.00	3.14	1.72	0.03	0.2	127.4	55.9	32.1
0484	Bakery products (e.g.,bread,biscuit	0.00	0.00	0.00	3.07	1.68	0.03	0.0	98.1	0.3	1.0
7643	Radiotelegraphic & radiotelephonic	0.06	0.05	0.00	2.96	1.61	0.03	1.1	3.8	0.0	0.0
6911	Structures & parts of struc.;iron/s	0.66	0.63	0.02	2.94	1.61	0.03	13.4	10.4	0.1	0.7
4312	Anim./veget.oils & fats,wholly/part	0.00	0.00	0.00	2.60	1.42	0.03	0.0	55.2	0.0	1.1
6732	Bars & rods,of iron/steel;hollow mi	0.00	0.00	0.00	2.49	1.36	0.03	0.0	4.0	0.4	0.5
6624	Non-refract.ceramic bricks,tiles,pi	5.04	4.82	0.14	2.41	1.32	0.02	165.6	24.3	3.5	3.1
5417	Medicaments(including veterinary me	0.23	0.22	0.01	2.34	1.28	0.02	0.4	1.7	0.0	0.1
6822	Copper and copper alloys,worked	0.00	0.00	0.00	2.28	1.25	0.02	0.0	8.6	0.3	0.3
4235	Olive oil	0.00	0.00	0.00	2.25	1.23	0.02	0.0	432.5	69.3	112.8
7721	Elect.app.such as switches,relays,f	0.30	0.28	0.01	2.08	1.13	0.02	1.3	1.5	1.7	3.9
7932	Ships,boats and other vessels	0.02	0.02	0.00	1.90	1.04	0.02	0.1	8.2	0.2	0.2
5989	Chemical products and preparations,	0.61	0.58	0.02	1.90	1.04	0.02	5.2	7.4	0.1	0.1
6733	Angles,shapes & sections & sheet pi	0.00	0.00	0.00	1.84	1.00	0.02	0.0	7.9	0.3	0.4
5530	Perfumery,cosmetics and toilet prep	0.00	0.00	0.00	1.80	0.98	0.02	0.1	8.5	0.7	0.5
8939	Miscellaneous art.of materials of d	0.60	0.58	0.02	1.74	0.95	0.02	7.5	6.0	0.2	1.8
1121	Wine of fresh grapes (including gra	0.00	0.00	0.00	1.74	0.95	0.02	0.0	193.3	0.5	0.3
6353	Builders' carpentry and joinery	0.07	0.07	0.00	1.55	0.85	0.02	1.5	19.4	0.0	0.3
5231	Metallic salts and peroxy salts of i	1.14	1.09	0.03	1.52	0.83	0.02	48.5	46.2	13.7	6.4
5138	Polycarboxylic acids & their anhydr	0.00	0.00	0.00	1.51	0.83	0.02	0.0	52.2	0.0	0.2
7252	Paper & paperboard cutting mach.of	0.00	0.00	0.00	1.42	0.78	0.01	0.0	18.2	0.1	0.8
7831	Public-service type passenger motor	0.00	0.00	0.00	1.37	0.75	0.01	0.0	5.7	0.0	0.2
6417	Paper & paperboard,corrugated,crepe	0.00	0.00	0.00	1.36	0.74	0.01	0.0	145.2	0.7	2.2
5542	Organic surface-active agents,n.e.s	0.01	0.01	0.00	1.34	0.73	0.01	0.2	15.6	0.2	0.8
6418	Paper & paperboard,impregnat.coat.s	0.04	0.04	0.00	1.30	0.71	0.01	0.6	7.3	0.0	1.7
5622	Mineral or chemical fertilizers,pho	0.00	0.00	0.00	1.24	0.68	0.01	0.0	252.9	244.6	228.5
7239	Parts of the machinery of 723.41 to	0.13	0.12	0.00	1.18	0.64	0.01	1.4	2.8	0.3	0.4
8741	Surveying,hydrographic,compasses et	0.00	0.00	0.00	1.15	0.63	0.01	0.0	15.8	0.3	0.4
8743	Instr.non electrical,for measuring,	0.00	0.00	0.00	1.14	0.62	0.01	0.0	17.7	0.3	0.7
6522	Cotton fabrics,woven,bleach.merceri	0.08	0.07	0.00	1.14	0.62	0.01	0.1	0.8	3.5	2.0
6994	Springs & leaves for springs,of iro	3.06	2.93	0.09	1.13	0.62	0.01	267.9	134.7	7.0	4.6
6924	Casks,drums,boxes of iron/steel for	0.05	0.04	0.00	1.12	0.61	0.01	0.9	6.5	0.1	1.0
7810	Passenger motor cars,for transport	0.00	0.00	0.00	1.07	0.58	0.01	0.0	0.4	0.0	0.0
2874	Lead ores and concentrates	0.38	0.36	0.01	1.06	0.58	0.01	15.4	52.3	1.5	2.1
5541	Soap;organic surface-active product	0.00	0.00	0.00	1.04	0.57	0.01	0.0	32.1	0.1	0.8
5833	Polystyrene and its copolymers	2.84	2.71	0.08	1.03	0.56	0.01	60.7	13.3	0.4	0.1
6997	Articles of iron or steel, n.e.s.	0.19	0.18	0.01	0.98	0.53	0.01	5.3	11.6	1.5	0.9
7752	Household type refrigerators & food	0.00	0.00	0.00	0.96	0.52	0.01	0.1	9.1	0.0	0.2
0589	Fruit otherwise prepared or preserv	0.00	0.00	0.00	0.94	0.51	0.01	0.0	41.9	0.2	0.2
5823	Alkyds and other polyesters	0.05	0.05	0.00	0.88	0.48	0.01	1.3	5.3	0.0	0.1
Total		55.98	53.51	1.61	151.56	82.75	1.56				

Source: Authors' calculation based on UN Comtrade.

**Table A.1.26 Algeria: 30 Largest Dynamic Export Products with respect to the World**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)	RCA Index (World Market) 2004
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)		
1110	Non alcoholic beverages,n.e.s.	0.13	0.0	2.54	0.0	111.8	0.07
2820	Waste and scrap metal of iron or st	4.55	0.0	63.76	0.2	93.5	0.74
545	Other fresh or chilled vegetables	0.12	0.0	1.55	0.0	90.8	0.03
2112	Calf skins,raw (fresh,salted,dried,	0.12	0.0	1.58	0.0	90.4	0.38
4313	Fatty acids,acid oils,and residues	0.24	0.0	2.90	0.0	85.6	0.36
6960	Cutlery	0.32	0.0	1.53	0.0	47.3	0.06
6749	Other sheets and plates,of iron or	16.05	0.1	70.65	0.2	44.8	0.61
2882	Other non-ferrous base metal waste	5.61	0.0	21.18	0.1	39.4	0.49
8931	Art.for the conveyance or packing o	0.31	0.0	0.92	0.0	30.9	0.01
5621	Mineral or chemical fertilizers,nit	16.15	0.1	39.64	0.1	25.2	1.39
7649	Parts of apparatus of division 76--	0.10	0.0	0.24	0.0	24.1	0.00
6421	Boxes,bags & oth.packing containers	0.72	0.0	1.64	0.0	22.8	0.04
2511	Waste paper,paperboard;only for use	0.26	0.0	0.59	0.0	22.1	0.04
6114	Leather of other bovine cattle and	0.47	0.0	1.03	0.0	21.5	0.02
360	Crustaceans and molluscs,fresh,chil	4.30	0.0	8.98	0.0	20.2	0.15
6522	Cotton fabrics,woven,bleach.merteri	0.25	0.0	0.52	0.0	19.8	0.01
7731	Insulated,elect.wire,cable,bars,str	1.29	0.0	2.67	0.0	19.8	0.02
3330	Petrol.oils & crude oils obt.from b	9254.36	42.0	17600.00	54.8	17.4	16.95
5225	Oth.inorg.bases & metallic oxid.,hy	56.04	0.3	104.74	0.3	16.9	3.59
5222	Inorganic acids and oxygen compound	0.60	0.0	1.12	0.0	16.7	0.06
548	Vegetable products,roots & tubers,f	1.35	0.0	2.45	0.0	16.1	0.50
7492	Taps,cocks,valves etc.for pipes,tan	0.39	0.0	0.66	0.0	13.7	0.00
6330	Cork manufactures	7.32	0.0	11.80	0.0	12.7	1.96
6783	Other tubes and pipes,of iron or st	1.66	0.0	2.64	0.0	12.2	0.04
7523	Complete digital central processing	0.10	0.0	0.15	0.0	10.3	0.00
6412	Printing paper & writing paper,in r	1.07	0.0	1.55	0.0	9.6	0.05
5121	Acyclic alcohols & their halogenate	12.90	0.1	18.58	0.1	9.6	0.31
341	Fish,fresh(live/dead)or chilled,exc	0.37	0.0	0.51	0.0	8.3	0.02
6712	Pig iron,cast iron and spiegeleisen	13.08	0.1	17.93	0.1	8.2	1.25
6821	Copper and copper alloys,refined or	0.16	0.0	0.21	0.0	7.7	0.00
	<b>Total</b>	<b>9400.41</b>	<b>42.7</b>	<b>17984.25</b>	<b>56.0</b>		

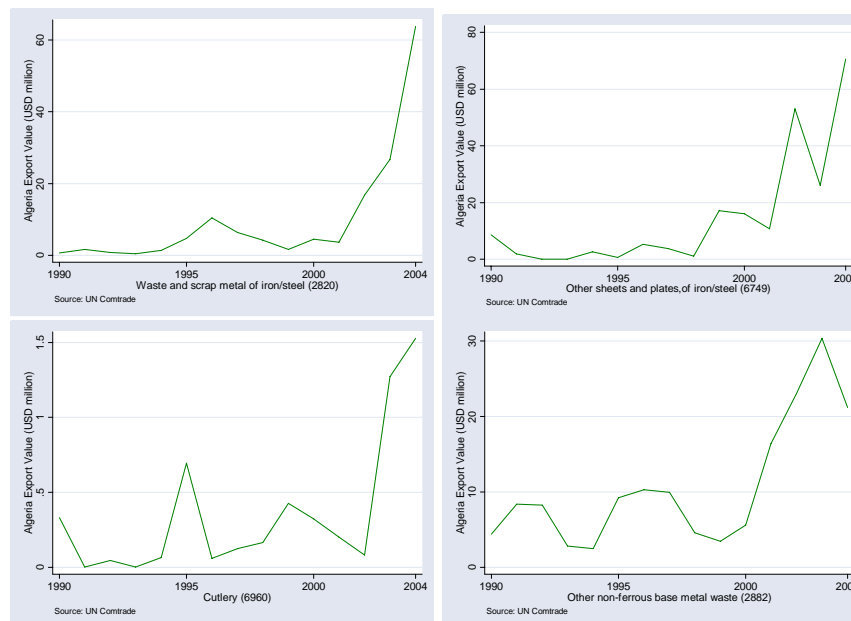
Source: Author's calculation based on UN COMTRADE.

**Table A.1.27 Algeria: Annual Growth Rate of 30 Largest Export Products**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)	RCA Index (World Market) 2004
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)		
3330	Petrol.oils & crude oils obt.from b	9254.36	42.0	17600.00	54.8	17.4	16.95
3413	Petroleum gases and other gaseous h	5735.39	26.0	6736.19	21.0	4.1	49.96
3414	Petroleum gases and other gaseous h	3281.49	14.9	4258.62	13.3	6.7	15.86
3352	Mineral tars and products of their	190.55	0.9	250.06	0.8	7.0	8.50
5225	Oth.inorg.bases & metallic oxid.,hy	56.04	0.3	104.74	0.3	16.9	3.59
6749	Other sheets and plates,of iron or	16.05	0.1	70.65	0.2	44.8	0.61
2820	Waste and scrap metal of iron or st	4.55	0.0	63.76	0.2	93.5	0.74
5621	Mineral or chemical fertilizers,nit	16.15	0.1	39.64	0.1	25.2	1.39
6861	Zinc and zinc alloys,unwrought	20.52	0.1	25.44	0.1	5.5	1.36
5221	Chemical elements	21.31	0.1	24.46	0.1	3.5	0.97
2882	Other non-ferrous base metal waste	5.61	0.0	21.18	0.1	39.4	0.49
5121	Acyclic alcohols & their halogenate	12.90	0.1	18.58	0.1	9.6	0.31
2713	Natural calcium phosphat.,natur.alu	20.56	0.1	18.29	0.1	-2.9	4.26
6712	Pig iron,cast iron and spiegeleisen	13.08	0.1	17.93	0.1	8.2	1.25
579	Fruit,fresh or dried, n.e.s.	14.75	0.1	14.57	0.0	-0.3	0.32
6330	Cork manufactures	7.32	0.0	11.80	0.0	12.7	1.96
6115	Sheep and lamb skin leather	11.59	0.1	9.94	0.0	-3.8	2.27
360	Crustaceans and molluscs,fresh,chil	4.30	0.0	8.98	0.0	20.2	0.15
1121	Wine of fresh grapes (including gra	5.26	0.0	4.51	0.0	-3.7	0.06
6725	Blooms,billets,slabs & sheet bars o	28.65	0.1	3.73	0.0	-39.9	0.04
4313	Fatty acids,acid oils,and residues	0.24	0.0	2.90	0.0	85.6	0.36
7239	Parts of the machinery of 723.41 to	5.29	0.0	2.82	0.0	-14.5	0.03
6954	Interchangeable tools for hand & ma	2.08	0.0	2.73	0.0	7.0	0.04
7731	Insulated,elect.wire,cable,bars,str	1.29	0.0	2.67	0.0	19.8	0.02
6783	Other tubes and pipes,of iron or st	1.66	0.0	2.64	0.0	12.2	0.04
1110	Non alcoholic beverages,n.e.s.	0.13	0.0	2.54	0.0	111.8	0.07
6782	seamlesstubes and pipes;blanks fo	3.74	0.0	2.45	0.0	-10.0	0.07
6744	Sheets & plates,rolled >4.75mm of i	2.82	0.0	2.45	0.0	-3.5	0.05
548	Vegetable products,roots & tubers,f	1.35	0.0	2.45	0.0	16.1	0.50
8741	Surveying,hydrographic,compasses et	6.03	0.0	2.23	0.0	-22.0	0.06
<b>Total</b>		<b>18745.05</b>	<b>85.1</b>	<b>29328.92</b>	<b>91.3</b>		

Source: Author's calculation based on UN COMTRADE.

**Figures A.1.1 to A.1.4 Algeria: Evolution of Selected Dynamic Products, (1990-2004)**



Source: Author's calculation based on UN COMTRADE.

**Table A.1.28 Morocco: Dynamic Export Products with respect to the World**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)	RCA Index (World Market) 2004
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)		
3352	Mineral tars and products of their	0.11	0.00	246.98	2.49	592.7	27.3
5224	Metallic oxides of zinc,chromium,ma	0.21	0.00	13.85	0.14	184.9	4.0
4235	Olive oil	1.06	0.01	55.70	0.56	168.9	10.7
7442	Lifting,handling,loading mach.conve	0.15	0.00	4.36	0.04	130.6	0.2
7599	Parts of and accessories suitable f	0.74	0.01	14.41	0.15	110.0	0.1
7512	Calculating machines,cash registers	0.33	0.00	5.92	0.06	106.5	1.3
6631	Hand polishing stones,whetstones,oi	0.10	0.00	1.76	0.02	103.4	0.6
5231	Metallic salts and peroxyalts of i	0.12	0.00	1.73	0.02	94.3	0.4
7810	Passenger motor cars,for transport	0.21	0.00	2.79	0.03	90.2	0.0
6647	Safety glass consisting of toughene	0.31	0.00	4.01	0.04	89.0	0.6
6623	Refractory bricks & other refract.c	0.11	0.00	1.34	0.01	85.1	0.3
5824	Polyamides	0.24	0.00	2.36	0.02	77.5	0.3
7252	Paper & paperboard cutting mach.of	0.11	0.00	1.07	0.01	77.3	0.3
2783	Common salt;rock sat,sea salt;pur.s	0.42	0.01	3.42	0.03	68.7	2.2
6289	Other articles of rubber,n.e.s.	0.11	0.00	0.85	0.01	66.8	0.1
4111	Fats and oils of fish and marine ma	2.50	0.03	18.87	0.19	65.8	28.2
7938	Tugs,special purpose vessels,floati	0.11	0.00	0.75	0.01	60.3	0.1
575	Grapes,fresh or dried	1.44	0.02	9.20	0.09	58.9	2.1
9410	Animals,live,n.e.s.,incl. zoo-anima	0.36	0.00	2.29	0.02	58.7	4.2
6664	Tableware & other articles of porce	0.43	0.01	2.70	0.03	58.3	0.8
6583	Travelling rugs and blankets,not kn	1.35	0.02	8.42	0.08	58.2	4.1
8996	Orthopaedic appliances,surgical bel	0.17	0.00	1.02	0.01	57.3	0.0
2820	Waste and scrap metal of iron or st	13.96	0.19	85.30	0.86	57.2	3.2
6760	Rails and railway track constructio	0.37	0.00	2.26	0.02	57.1	1.0
5831	Polyethylene	0.26	0.00	1.48	0.01	54.6	0.0
9710	Gold,non-monetary	3.15	0.04	16.32	0.16	50.9	0.4
5542	Organic surface-active agents,n.e.s	2.98	0.04	14.72	0.15	49.0	0.8
483	Macaroni,spaghetti and similar prod	0.74	0.01	3.65	0.04	49.0	1.5
344	Fish fillets,frozen	0.51	0.01	2.37	0.02	47.1	0.3
6911	Structures & parts of struc.;iron/s	1.10	0.01	5.17	0.05	47.1	0.3
<b>Total</b>		<b>33.78</b>	<b>0.45</b>	<b>535.06</b>	<b>5.39</b>		

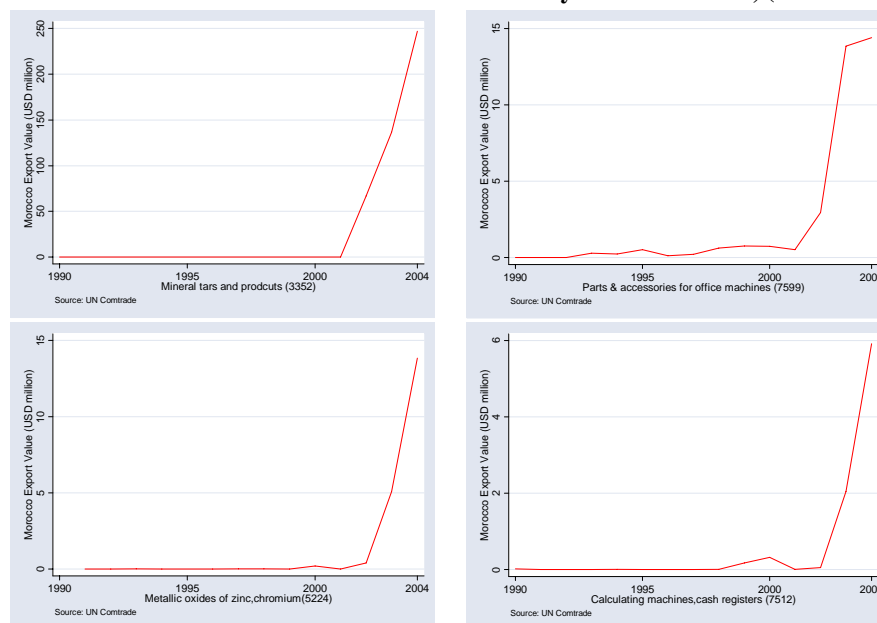
Source: Author's calculation based on UN COMTRADE.

**Table A.1.29 Morocco: Annual Growth Rate of 30 Largest Export Products**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)	
5222	Inorganic acids and oxygen compound	507.19	6.82	715.59	7.21	9.0
7763	Diodes,transistors and sim.semi-con	445.11	5.99	623.01	6.28	8.8
8439	Other outer garments of textile fab	439.28	5.91	598.89	6.04	8.1
8423	Trousers,breeches etc.of textile fa	405.42	5.46	438.16	4.42	2.0
7731	Insulated,elect.wire,cable,bars,str	196.69	2.65	423.17	4.26	21.1
2713	Natural calcium phosphat.,natur.alu	389.33	5.24	420.97	4.24	2.0
371	Fish,prepared or preserved,n.e.s. i	201.81	2.72	355.43	3.58	15.2
5629	Fertilizers,n.e.s.	247.47	3.33	325.14	3.28	7.1
360	Crustaceans and molluscs,fresh,chil	635.61	8.55	300.58	3.03	-17.1
8462	Under garments,knitted of cotton	206.17	2.77	268.94	2.71	6.9
571	Oranges,mandarins,clementines and o	192.78	2.59	251.93	2.54	6.9
3352	Mineral tars and products of their	0.11	0.00	246.98	2.49	592.7
8451	Jerseys,pull-overs,twinsets,cardiga	179.17	2.41	210.67	2.12	4.1
8459	Other outer garments & clothing,kni	212.09	2.85	171.49	1.73	-5.2
8465	Corsets,brassieres,suspendres and t	131.47	1.77	162.31	1.64	5.4
8463	Under garments,knitted,of synthetic	67.32	0.91	162.16	1.63	24.6
8510	Footwear	104.94	1.41	161.68	1.63	11.4
8431	Coats and jackets of textile fabric	94.69	1.27	160.55	1.62	14.1
8429	Other outer garments of textile fab	106.83	1.44	160.18	1.61	10.7
7721	Elect.app.such as switches,relays,f	44.11	0.59	155.23	1.56	37.0
8434	Skirts,women's,of textile fabrics	100.73	1.36	148.34	1.49	10.2
8441	Shirts,men's,of textile fabrics	109.90	1.48	138.91	1.40	6.0
565	Vegetables,prepared or preserved,n.	86.40	1.16	130.29	1.31	10.8
545	Other fresh or chilled vegetables	33.52	0.45	119.65	1.21	37.5
8435	Blouses of textile fabrics	106.60	1.43	116.58	1.17	2.3
544	Tomatoes,fresh or chilled	81.85	1.10	112.95	1.14	8.4
341	Fish,fresh(live/dead)or chilled,exc	81.91	1.10	110.85	1.12	7.9
5622	Mineral or chemical fertilizers,pho	75.87	1.02	106.24	1.07	8.8
6749	Other sheets and plates,of iron or	29.70	0.40	91.96	0.93	32.7
2820	Waste and scrap metal of iron or st	13.96	0.19	85.30	0.86	57.2
	<b>Total</b>	<b>5528.01</b>	<b>74.38</b>	<b>7474.11</b>	<b>75.32</b>	<b>946.2</b>

Source: Author's calculation based on UN COMTRADE.

**Figures A.1.5 to A.1.8 Morocco Evolution of Selected Dynamic Products, (1990-2004)**



Source: Author's calculation based on UN COMTRADE.

**Table A.1.30 Tunisia: Dynamic Export Products with respect to the World**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)	RCA Index (World Market) 2004
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)		
6732	Bars & rods,of iron/steel;hollow mi	0.25	0.00	12.01	0.12	164.0	0.5
7528	Off-line data processing equipment.	0.42	0.01	17.34	0.18	152.9	0.5
813	Oil-cake & other residues (except d	0.60	0.01	22.83	0.24	147.9	1.6
6517	Yarn of regenerated fibres,not for	0.13	0.00	3.19	0.03	124.3	1.0
6552	Knitted/crocheted fabrics of fibres	0.41	0.01	9.76	0.10	121.4	0.5
6749	Other sheets and plates,of iron or	0.11	0.00	2.54	0.03	118.7	0.1
6210	Materials of rubber(e.g.,pastes,pla	0.44	0.01	9.24	0.10	114.1	0.7
6418	Paper & paperboard,impregnat.coat.s	1.91	0.03	38.56	0.40	112.0	1.7
8996	Orthopaedic appliances,surgical bel	0.28	0.00	5.38	0.06	109.1	0.2
819	Food wastes and prepared animal fee	1.29	0.02	23.75	0.25	107.1	1.8
7821	Motor vehicles for transport of goo	0.22	0.00	3.91	0.04	105.4	0.0
6417	Paper & paperboard,corrugated,crepe	0.43	0.01	7.46	0.08	103.8	2.2
342	Fish,frozen (excluding fillets)	0.63	0.01	9.47	0.10	97.0	0.7
7599	Parts of and accessories suitable f	0.98	0.02	13.55	0.14	93.0	0.1
4312	Anim./veget.oils & fats,wholly/part	0.31	0.01	3.28	0.03	80.3	1.1
350	Fish,dried,salted or in brine ; smo	0.33	0.01	3.28	0.03	78.1	0.9
2919	Other materials of animal origin, n	1.68	0.03	16.57	0.17	77.2	3.4
8720	Medical instruments and appliances	5.33	0.09	51.68	0.53	76.5	1.0
6351	Wooden packing cases,boxes,crates,d	0.16	0.00	1.31	0.01	67.9	2.3
8993	Candles,matches,pyrophoric alloys e	0.76	0.01	5.95	0.06	67.1	1.7
6912	Structures & parts of struc.;alumin	0.11	0.00	0.85	0.01	67.0	0.2
6770	Iron/steel wire/wheth/not coated,bu	1.59	0.03	12.25	0.13	66.7	1.6
6782	seamlesstubes and pipes;blanks fo	0.48	0.01	3.26	0.03	61.9	0.3
6639	Articles of ceramic materials,n.e.s	1.06	0.02	7.09	0.07	60.7	2.3
7932	Ships,boats and other vessels	1.85	0.03	12.10	0.12	59.8	0.2
5221	Chemical elements	0.18	0.00	1.14	0.01	59.4	0.1
8742	Drawing,marking-out,disc calculator	0.63	0.01	3.99	0.04	58.9	0.2
6733	Angles,shapes & sections & sheet pi	0.77	0.01	4.82	0.05	57.9	0.4
8921	Books,pamphlets,maps and globes,pri	0.59	0.01	3.64	0.04	57.9	0.2
8983	Gramophone records and sim.sound re	0.81	0.01	4.86	0.05	56.5	0.1
	<b>Total</b>	<b>24.74</b>	<b>0.42</b>	<b>315.07</b>	<b>3.25</b>		

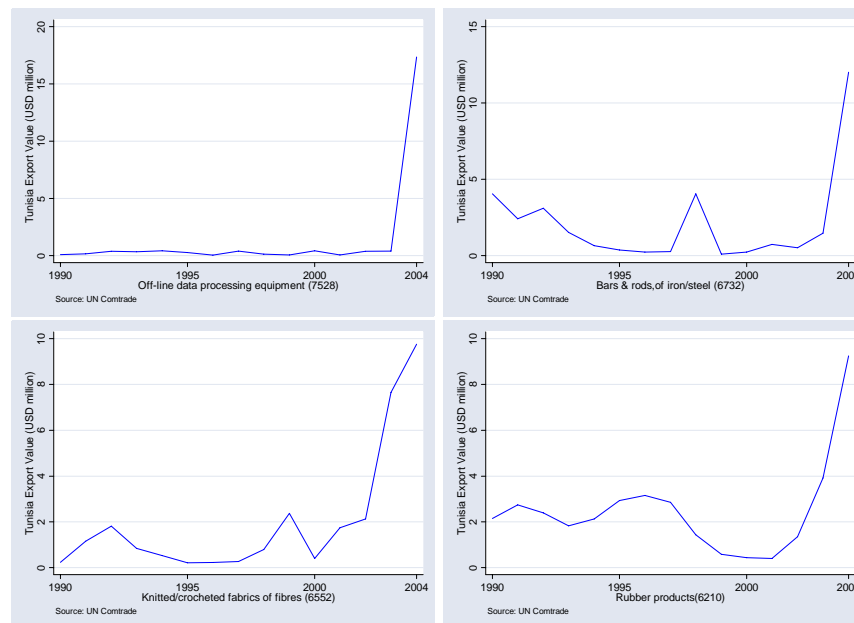
Source: Author's calculation based on UN COMTRADE.

**Table A.1.31 Tunisia: Annual Growth Rate of 30 Largest Export Products**

SITC	Product Name	Exports 2000		Exports 2004		Annual Growth Rate (2000-04)	RCA Index (World Market) 2004
		Value (US mil)	Share of Total Exports (%)	Value (US mil)	Share of Total Exports (%)		
3330	Petrol.oils & crude oils obt.from b	610.73	10.44	751.60	7.76	5.3	2.4
8423	Trousers,breeches etc.of textile fa	596.59	10.20	729.10	7.53	5.1	33.9
8429	Other outer garments of textile fab	309.82	5.30	644.40	6.65	20.1	53.6
8439	Other outer garments of textile fab	367.18	6.28	624.75	6.45	14.2	17.0
4235	Olive oil	196.44	3.36	578.48	5.97	31.0	112.8
7721	Elect.app.such as switches,relays,f	165.71	2.83	413.89	4.27	25.7	3.9
7731	Insulated,elect.wire,cable,bars,str	239.13	4.09	405.22	4.18	14.1	7.6
5629	Fertilizers,n.e.s.	157.71	2.70	280.85	2.90	15.5	43.9
8510	Footwear	135.57	2.32	264.51	2.73	18.2	4.6
8462	Under garments,knitted of cotton	105.11	1.80	227.76	2.35	21.3	7.9
8465	Corsets,brassieres,suspendres and t	125.10	2.14	205.17	2.12	13.2	27.4
5222	Inorganic acids and oxygen compound	178.07	3.04	181.78	1.88	0.5	32.1
8451	Jerseys,pull-overs,twinsets,cardiga	144.23	2.47	180.77	1.87	5.8	5.6
6123	Parts of footwear	129.71	2.22	162.55	1.68	5.8	25.1
7849	Other parts & accessories of motor	32.70	0.56	160.58	1.66	48.9	0.7
5622	Mineral or chemical fertilizers,pho	107.78	1.84	156.53	1.62	9.8	228.5
8459	Other outer garments & clothing,kni	113.47	1.94	147.35	1.52	6.8	4.1
8841	Lenses,prisms,mirrors,other optical	48.50	0.83	126.46	1.31	27.1	5.1
8441	Shirts,men's,of textile fabrics	84.10	1.44	105.29	1.09	5.8	9.3
8939	Miscellaneous art.of materials of d	29.51	0.50	102.61	1.06	36.6	1.8
579	Fruit,fresh or dried, n.e.s.	40.26	0.69	94.09	0.97	23.6	6.8
8463	Under garments,knitted,of synthetic	48.17	0.82	90.52	0.93	17.1	7.5
5232	Metallic salts and peroxyalts of i	58.31	1.00	84.11	0.87	9.6	11.5
360	Crustaceans and molluscs,fresh,chil	69.93	1.20	83.89	0.87	4.7	4.5
6589	Other made-up articles of textile m	18.57	0.32	83.83	0.87	45.8	10.5
7712	Other electric power machinery,part	45.96	0.79	77.92	0.80	14.1	2.2
7788	Other elect.machinery and equipment	26.46	0.45	75.78	0.78	30.1	1.0
8434	Skirts,women's,of textile fabrics	54.56	0.93	62.23	0.64	3.3	9.8
6584	Bed linen,table linen,toilet & kitc	11.05	0.19	57.14	0.59	50.8	3.6
6522	Cotton fabrics,woven,bleach.merceri	50.09	0.86	55.93	0.58	2.8	2.0
	<b>Total</b>	<b>4300.51</b>	<b>73.51</b>	<b>7215.10</b>	<b>74.50</b>		

Source: Author's calculation based on UN COMTRADE.

**Figures A.1.9 to A.1.12 Tunisia: Evolution of Selected Dynamic Products, (1990-2004)**



Source: Author's calculation based on UN COMTRADE.

**Table A.1.32 Maghreb: Intra-Industry Trade, Grubel-Lloyd Index**

	Total Trade		Region		ROW		Manufacturing Trade, % of total merchandise trade, 2004	
	1990	2004	1990	2004	1990	2004	Exports	Imports
	Algeria	8.3	5.0	17.9	29.3	8.0	4.0	1.2
Morocco	24.2	30.2	32.9	38.6	22.1	29.5	66.4	65.8
Tunisia	31.7	43.9	27.1	33.3	30.9	43.2	77.1	74.9
Maghreb Average	21.4	26.3	26.0	33.7	20.3	25.6	48.2	71.4
ASEAN5 Average	46.7	66.4	58.8	70.1	41.7	62.3	62.2	70.7
NAFTA Average	64.9	72.8	65.6	72.9	52.4	43.1	57.4	71.8

Note: The index was calculated for manufacturing trade only (groups 5 through 8 excluding non-ferrous metal, using 2 digit SITC Rev. 2 classification). Source: Authors calculation based on data from UN Comtrade.

**Table A.1.33 Maghreb vs Comparators: Intra-Industry Trade by Product Groups, Grubel-Lloyd Index**

	Year	Total Trade			Region			ROW		
		Chemicals	Machinery & Transport	Other Manufactures	Chemicals	Machinery & Transport	Other Manufactures	Chemicals	Machinery & Transport	Other Manufactures
Algeria	1990	16.1	4.8	11.3	31.4	22.2	11.2	15.7	4.5	11.3
	2004	14.1	1.1	7.2	62.8	3.9	17.2	12.3	1.1	4.8
Morocco	1990	27.4	18.8	26.9	11.0	34.2	40.2	25.1	17.6	24.2
	2004	27.3	41.4	23.0	22.6	45.2	46.9	24.4	41.1	22.7
Tunisia	1990	22.0	29.9	35.3	19.3	60.7	18.7	20.8	28.8	34.6
	2004	26.1	53.5	42.0	34.1	11.5	38.6	24.4	53.0	41.4
Maghreb Average	1990	21.9	17.9	24.5	20.5	39.0	23.4	20.5	17.0	23.4
	2004	22.5	32.0	24.1	39.8	20.2	34.2	20.4	31.7	23.0
NAFTA Average	1990	69.0	66.3	58.8	55.5	67.0	64.0	72.9	51.3	44.2
	2004	67.7	77.8	63.7	63.2	74.2	72.5	65.3	43.1	36.6
ASEAN5 Average	1990	35.5	48.8	44.2	43.5	62.4	53.0	28.6	43.8	39.4
	2004	61.9	70.5	57.1	58.2	72.1	64.7	60.3	66.6	52.6

Note: Authors' calculation using 2 digit, SITC Revision 2 from UN Comtrade. The classifications of product groups are defined as: chemicals (SITC 5); machinery & transports (SITC 7) and other manufactures (SITC 6+8-68).

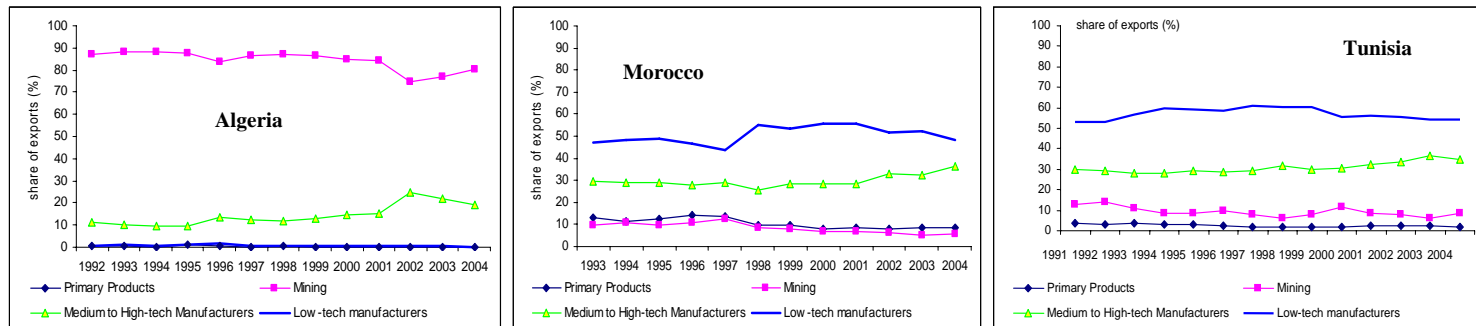
**Table A.1.34 : Trade in Parts and Components in the Maghreb Region and Comparators, 1993-2004**

Country	year	total exports of P&C (\$millions)	total imports of P&C (\$millions)	Exports of P&C as % of total exports	Imports of P&C as % of total imports	Share of P&C as % of manufacturing exports	Share of P&C as % of manufacturing imports
Algeria	1990	3.8	856.6	0.03	8.80	1.73	14.61
	2000	7.3	861.2	0.03	9.41	4.64	17.06
	2004	6.29	2074.82	0.02	11.33	3.31	18.26
Morocco	1990	48.8	350.1	1.15	5.06	3.51	10.02
	2000	118.9	1028.8	1.60	8.92	3.07	16.41
	2004	303.2	1154.0	3.06	6.47	5.69	11.43
Tunisia	1990	118.0	405.3	3.37	7.40	6.18	11.81
	2000	348.8	784.7	5.96	9.16	8.96	13.72
	2004	886.5	1548.4	9.15	12.16	13.32	18.45
Maghreb	1990	170.7	1612.0	0.91	7.28	4.85	12.61
	2000	475.0	2674.7	1.35	9.14	6.00	15.70
	2004	1196.0	4777.2	2.31	9.78	9.82	16.00
CEE	1990	370.8	249.1	1.67	1.55	3.35	2.88
	2000	16300.0	21500.0	14.90	15.82	19.11	23.39
	2004	44100.0	41100.0	18.48	15.71	23.22	22.51
EU-15	1990	164000.00	150000.00	11.07	9.70	16.12	15.65
	2000	307000.00	288000.00	13.98	12.97	20.41	20.50
	2004	417000.00	395000.00	12.47	12.04	18.96	19.65
ASEAN5	1990	13300.0	26000.0	9.55	16.45	17.72	25.98
	2000	77500.0	81700.0	19.15	23.70	26.05	33.76
	2004	82500.0	106000.0	16.34	23.72	24.61	35.14
NAFTA	1990	90500.0	87500.0	16.57	13.18	27.56	19.27
	2000	235000.0	252000.0	19.18	15.06	27.22	20.82
	2004	219000.0	274000.0	16.54	13.72	25.21	20.15

Source: Authors calculation based on UN COMTRADE database using SITC Rev 2 at 4 digit level  
Note: Manufactured exports are products code 6 to 8 excluding 68 using SITC Rev. 2.

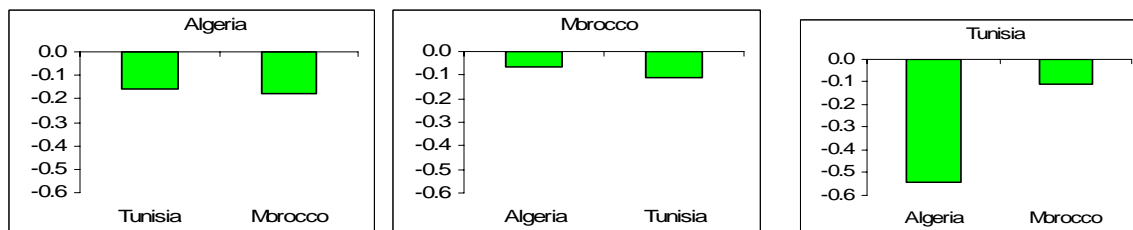


Figure s A. 1.13 to A.1.15. Maghreb: Share of High Tech Exports in Total Merchandise Exports (in percent), 1990-2004



Note. Degree of technological intensity follows OECD definition. Source: Authors' calculations using UN Comtrade data

Figures A.1.16 to A.1.18: Maghreb Intra-regional Merchandise Trade Potential (% of GDP), on annual average



Source: Authors' calculation using results of the panel gravity trade regression with 1980-2004 data. Note: Negative coefficients imply that a country is over-exporting to its trading partner, i.e. the actual trade flows exceed the predicted values.

Table A.1.35 Intra-Maghreb Merchandise Trade Potential, 1980-2004 (in percent of GDP), annual average

	Algeria	Morocco	Tunisia
<b>Exports to</b>			
Algeria	n/a	-0.07	-0.54
Tunisia	-0.16	-0.11	n/a
Morocco	-0.18	n/a	-0.11

Source: Authors' calculation using results of the panel gravity trade regression with 1980-2004 data. Note: Negative coefficients imply that a country is over-exporting to its trading partner, i.e. the actual trade flows exceed the predicted values.

**Table A.1.36: Estimated Trade Potential (percent of GDP)**

	Algeria		Morocco		Tunisia	
	Country	Export Potential	Country	Export Potential	Country	Export Potential
<b>EU</b>						
<b>Total export potential</b>		-0.61		0.33		-0.18
<b>Top 5 export potentials</b>						
	Hong Kong	0.00	France	2.25	United Kingdom	0.53
	Israel	0.00	United States	1.22	France	0.48
	Colombia	0.00	Germany	0.84	Switzerland	0.17
	Kenya	0.00	Portugal	0.77	United States	0.08
	Iceland	0.00	Spain	0.47	Portugal	0.05
<b>Top 5 over-export destinations</b>						
	United States	-5.51	India	-0.77	Belgium	-2.06
	Italy	-2.89	Japan	-0.61	Germany	-1.53
	Spain	-1.83	Turkey	-0.23	India	-0.43
	Germany	-1.52	Saudi Arabia	-0.21	Greece	-0.40
	Belgium	-1.52	Brazil	-0.18	Turkey	-0.24

Source: Authors' calculation using results of the panel gravity trade regression with 2004 data. Note: Negative coefficients imply that a country is over-exporting to its trading partner, i.e. the actual trade flows exceed the predicted values.

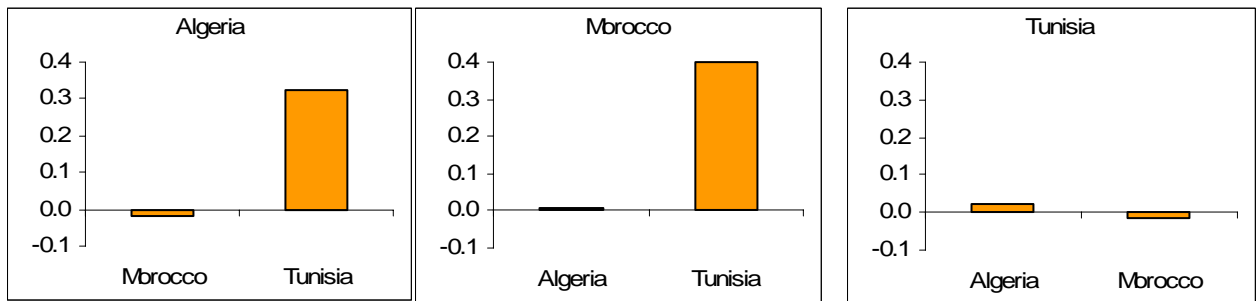
**Table A.1.37: Intra-Maghreb FDI Stock Potential (percent of GDP)**

	Algeria	Morocco	Tunisia
<b>Under (+) / Over (-) Investment Into:</b>			
Algeria	n/a	0.01	0.02
Morocco	-0.02	n/a	-0.01
Tunisia	0.33	0.40	n/a

Source: Author's calculation using results of gravity FDI regression with 2002 data.

Note: Negative coefficients imply that a country is over-investing in the host country i.e. the actual fdi stock exceed the predicted values.

**Figures A. 1.19 to A.1.21: Intra-Maghreb FDI Stock Potential (percent of GDP)**



Source: Author's calculation using results of gravity FDI regression with 2002 data. Note:

Negative coefficients imply that a country is over-investing in the host country i.e. the actual fdi stock exceed the predicted values.

**Table A.1.38: Estimated FDI stock Potential (percent of GDP)**

<b>Algeria</b>		<b>Morocco</b>		<b>Tunisia</b>	
Country	FDI Potential	Country	FDI Potential	Country	FDI Potential
<b><u>Top 6 Under-investing Countries</u></b>					
<b>From:</b> Switzerland	0.67	United States	1.81	Luxemberg	6.11
<b>From:</b> Germany	0.29	United Kingdom	1.23	Switzerland	4.23
<b>From:</b> France	0.28	Luxemberg	0.91	Germany	3.05
<b>From:</b> Netherlands	0.17	Netherlands	0.86	Netherlands	2.57
<b>From:</b> United Kingdom	0.07	Saudi Arabia	0.67	France	2.39
<b>From:</b> Canada	0.03	Germany	0.58	Saudi Arabia	2.03
<b><u>Top 6 Over-investing Countries</u></b>					
<b>From:</b> Austria	-0.01	Korea	-0.09	Hungary	-0.11
<b>From:</b> Sweden	-0.09	Italy	-0.30	Kuwait	-0.53
<b>From:</b> Japan	-0.09	Portugal	-0.38	Spain	-2.05
<b>From:</b> Belgium	-0.13	Sweden	-0.71	Portugal	-2.08
<b>From:</b> Italy	-0.66	Spain	-2.46	United States	-2.81
<b>From:</b> United States	-3.71	France	-3.65	Italy	-3.29

Note: FDI potential is calculated using 2002 data based on countries with existing investment in the Maghreb. Below investment potential implies that the recipient country can potentially receive inward investment from the listed countries based on the gravity FDI model predictions.

## B. Annex to Chapter 2:

**Table A.2.1 Maghreb vs. Comparators: Financial Market Indicators**

regions	market capitalization (% of GDP)		market capitalization value (US bil)		stock turnover ratio (%)		no. of listed domestic companies	
	1996	2004	1996	2004	1996	2004	1996	2004
Maghreb	22.8	29.7	6.5	13.9	3.7	8.8	38.5	48.0
MENA	20.3	38.4	51.4	141.0	17.8	22.7	1138.0	1627.0
CEE	12.1	25.6	6.9	29.0	75.9	38.6	510.6	144.8
SEE	4.4	19.9	0.8	8.5	7.5	13.0	25.8	1502.3

Note: MGB= Maghreb countries (Morocco, Algeria, Tunisia); SEE= Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Macedonia, Romania and Serbia & Montenegro; CEE = Central and European countries (Poland, Hungary, Czech and Slovak Republic, Slovenia). Source: WDI, 2005.

**Table A.2.2: Tariff Rates (percent), 2004**

	MFN Simple Average (%)			Total Merchandise Imports	
	Total Merchandise Imports	Agriculture Imports	Non-Agriculture Imports	Bound Rate (%)	Binding Coverage (%)
Algeria	18.7	23.0	18.1	n/a	n/a
Morocco	30.2	48.6	27.5	41.3	100.0
Tunisia	32.7	69.3	23.6	57.8	57.4
Maghreb Average	27.2	47.0	23.1	49.5	78.7
CEE Average	8.19	12.19	7.35	11.34	99.06
ASEAN5 Average	7.4	10.1	7.0	22.0	78.2
NAFTA Average	8.5	13.8	9.3	14.5	99.9

Source: World Trade Report, 2005 and WTO database 2005. Note: The latest available data for Algeria (2003) and Morocco (2002) was used. Regional averages utilize the most recent tariff data up until 2004.

**Table A.2.3: Power & Water Indicators, 2004**

	Access				Quality
	Access to Electricity Network (% of population)	Energy Use per PPP GDP (kg of oil equivalent/1000 PPP USD, constant 2000)	Access to Improved Water Sources (% of population)	Access to Improved Sanitation (% of population)	Electric losses (% of output)
Algeria	96.0	177.3	87.0	92.0	14.2
Morocco	47.0	97.6	80.0	61.0	16.1
Tunisia	95.0	123.3	82.0	80.0	11.2
East Asia & Pacific	54.0	217.9	75.0	60.0	7.3
Europe & Central Asia	99.0	375.0	87.0	78.0	13.0
Middle East & North Africa	88.0	235.8	85.0	77.0	15.5

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. Source: WDI 2005, ITU 2005.

**Table A.2.4: Road Indicators, 2004**

	Access		Cost	Quality
	Road Density (km/1000 people)	Road Density (km/1000 sq km)	Pump price for diesel fuel (US\$ per liter)	Paved Roads (% of total roads)
Algeria	3.5	43.7	0.15	68.9
Morocco	2.0	129.3	0.70	56.4
Tunisia	2.0	122.3	0.39	65.4
East Asia & Pacific	1.1	126.5	0.40	32.3
Europe & Central Asia	2.9	59.2	0.90	74.0
Middle East & North Africa	0.3	11.1	0.15	66.3

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best.  
Source: WDI, 2005.

**Table A.2.5: Railway Indicators, 2004**

	Access			Cost		Quality	
	Railways, passengers carried (million passenger-km)	Rail Lines Density (km/1000 people)	Rail Lines Density (km/1000 sq km)	Railways, goods transported (million ton-km)	Avg. Passenger Rail Tariff (PPP cent/passenger-km)	Avg. Freight Rail Tariff (PPP cent/ton-km)	Commercial Perception of Railroad Services Index
Algeria	950	0.11	1.50	1945	-	-	-
Morocco	2614	0.06	4.27	5535	7	8	3.2
Tunisia	1242	0.19	12.29	2173	8	6	3.7
East Asia & Pacific	2017	-	-	2662	5	13	3.7
Europe & Central Asia	2227	9.3	13.66	9675	911	1114	3.7
Middle East & North Africa	1265	0.1	9.6	2364	5	6	3.5

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. East Asia & Pacific comprises of China, Malaysia, Indonesia and Thailand.

Source: WDI, 2005 and Estache and Goicoechea, 2005.

**Table A.2.6: Port Indicators, 2004**

	Access		Cost	Quality
	Container port traffic (TEU: 20 foot equivalent units)	Total Merchant Fleet (in 000 grt)	CIF/FOB Freight cost (% of imports)	Commercial Perception of Port Facilities Index
Algeria	354724	862	9.3	-
Morocco	560682	523	17.4	3.7
Tunisia	230671	175	5.2	4.4
East Asia & Pacific	102039032	1766	9.9	4.2
Europe & Central Asia	-	1011	4.5	3.6
Middle East & North Africa	1039369	832	-	4.1

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. East Asia & Pacific comprises of China, Malaysia, Indonesia and Thailand.

Source: WDI, 2005, Review of Maritime Transport 2005 and Estache and Goicoechea, 2005.

**Table A.2.7: Air Transport Indicators, 2004**

	Access			Quality
	Air transport, passengers carried (millions)	Air transport, freight (million tons per km)	Air transport, registered carrier departures worldwide	Commercial Perception of Air Transport Services Index
Algeria	3.2	21.44	48531.00	-
Morocco	3.0	61.90	41526.00	4.8
Tunisia	1.9	20.29	20554.00	5.4
East Asia & Pacific	203.3	13730.1	2078864	4.7
Europe & Central Asia	65.1	2138.5	984537	3.9
Middle East & North Africa	34.0	1103.5	357602	4.9

Note: The most recent data is used beginning with 2004. For commercial perception indices , 1=worst and 7=best. East Asia & Pacific comprises of China, Malaysia, Indonesia and Thailand.

Source: WDI, 2005 and Estache and Goicoechea, 2005.

**Table A.2.8: Telephone Indicators, 2004**

	Access			Cost				Quality	
	Telephone mainlines (per 1,000 people)	Mobile phone subscribers (per 1,000 people)	Price basket for residential fixed line (US\$ per month)	Price basket for mobile (US\$ per month)	Cost of Local Phone Call (US\$/3 minutes)	Cost of Cellular Local Call (US \$/3 off-peak minutes)	Telephone average cost of call to US (US\$ per three minutes)	Telephone faults (per 100 mainlines)	Unmet Demand (% of main telephone lines in operation)
Algeria	70.7	144.7	10.2	5.1	0.04	0.78	2.08	6	39
Morocco	43.9	313.1	16.0	18.4	0.17	0.33	1.41	25	0
Tunisia	121.2	358.7	6.8	4.7	0.02	0.41	2.28	30	11
East Asia & Pacific	187.9	243.5	5.1	4.5	0.05	0.42	1.2	32	13
Europe & Central Asia	241.7	457.5	10.3	3.5	0.07	0.40	1.61	41	8
Middle East & North Africa	90.6	128.6	8.1	4.9	0.06	0.52	1.66	-	26

Source: WDI 2005, ITU 2005, World Bank ICT at a glance tables and Estache and Goicoechea, 2005. Note: Unmet demand is the ratio of telephone mainline listing wait list to the total main lines in operations.  
Note: The most recent data is used beginning with 2004.

**Table A.2.9: Internet and other media, 2004**

	Access				Cost	Quality	
	Internet users (per 1,000 people)	internet host (per 1000 people)	personal computers (per 1000 people)	Households with television (%)	Price basket for Internet (US\$ per month)	Broadband subscribers (per 1,000 people)	International Internet bandwidth (bits per person)
Algeria	26.1	0.03	7.5	97.5	17.8	1.1	4
Morocco	117.4	0.13	16.3	76.0	25.3	2.1	26
Tunisia	84.1	0.04	33.5	90.2	17.3	0.7	44
East Asia & Pacific	73.8	1.15	39.6	79.6	19.9	13.4	48
Europe & Central Asia	138.0	5.38	77.2	91.8	19.8	2.4	210
Middle East & North Africa	41.5	0.13	19.6	88.0	24.5	0.2	15

Source: WDI 2005, ITU 2005, World Bank ICT at a glance tables.  
Note: The most recent data is used beginning with 2004.

**Table A.2.10: Banking, 2004**

	Sector Structure			Access	Cost			Quality	
	Banking assets held by foreign-owned banks (% of total banking assets)	Banking assets held by government-owned banks (% of total banking assets)	Bank Concentration (%)	Domestic credit to private sector (% of GDP)	Interest rate spread (lending rate minus deposit rate)	Lending interest rate (%)	Bank Overhead Costs / Total Assets (%)	Bank nonperforming loans to total (%)	Net Interest Margin (%)
Algeria	3.9	95.7	97.8	11.0	5.5	8.0	3.3	27.0	4.0
Morocco	20.8	35.0	73.8	56.7	7.9	11.5	2.2	19.4	3.7
Tunisia	15.7	42.7	46.8	65.2	2.0	5.0	2.5	23.7	2.4
East Asia & Pacific	67.6	6.4	60.1	48.5	6.3	13.3	2.7	13.2	4.1
Europe & Central Asia	50.0	12.0	63.1	26.6	5.8	13.6	4.9	5.7	5.1
Middle East & North Africa	15.7	35.0	78.3	39.8	5.5	10.70	2.3	18.0	3.2

Note: Overhead cost is the value of a bank's overhead costs as a share of its total assets. Net interest margin is the value of bank's net interest revenue as a share of its interest-bearing (total earning) assets. Bank concentration is the asset values of 3 largest banks as a share of assets of all commercial banks.

Source: Beck et. al(2000), WDI 2005. The most recent data is used beginning with 2004.

**Table A.2.11: Selected Doing Business Indicators, 2004**

Country	Starting a Business			Hiring and Firing Workers					Registering Property			Enforcing Contracts		
	Procedures (number)	Time (days)	Cost (% of income per capita)	Difficulty of Hiring Index	Rigidity of Hours Index	Difficulty of Firing Index	Rigidity of Employment Index	Firing costs (weeks of wages)	Procedures (number)	Time (days)	Cost (% of property value)	Procedures (number)	Time (days)	Cost (% of debt)
Algeria	14	26	30	56	60	50	55	17	16	52	9	49	407	28.7
Morocco	5	11	12.2	100	40	40	60	83	3	82	6.1	17	240	17.7
Tunisia	9	14	10.9	61	0	100	54	29	5	57	6.1	14	27	12
East Asia & Pacific	9	57	56	27	39	28	31	59	5	50	5	29	333	49
Europe & Central Asia	10	42	15	35	57	42	45	34	7	132	3	30	337	17
Middle East & North Africa	11	45	72	29	51	36	39	63	6	48	7	40	422	17

Source: Doing Business Indicators, 2005.

**Table A.2.12: Selected Doing Business Indicators, 2005**

country	Dealing with Licenses			Trading Across Borders					Closing a Business			Recovery Rate (cents on the dollar)
	Procedures (number)	Time (days)	Cost (% of income per capita)	Documents for export (number)	Signatures for export (number)	Time for export (days)	Documents for import (number)	Signatures for import (number)	Time for import (days)	Time (years)	Cost (% of estate)	
Algeria	25	244	70.5	8	8	29	8	12	51	3.5	4	38
Morocco	21	217	1303	7	13	31	11	17	33	1.8	18	35
Tunisia	21	154	340	5	8	25	8	12	33	1.3	7	52
East Asia & Pacific	21	189	158	7	8	28	10	10	31	3	24	35
Europe & Central Asia	21	252	154	8	11	32	12	15	43	3	14	30
Middle East & North Africa	20	216	336	7	15	35	11	22	44	4	13	28

Source: Doing Business Indicators, 2005.

**Table A.2.13: Perceptions on the Financial Sector, 2004**

	Financial Market Sophistication	Venture capital mobility	Regulation of securities exchanges
	(a)	(b)	(c)
Tunisia	3.6	3.8	4.8
Morocco	3.9	3.4	4.6
Algeria	2	2	3.4

Notes: (a) 1=lower than international norms, 7=higher than international norms; (b) 1=difficult, 7=easy; (c) 1=non transparent, ineffective, 7=transparent, effective and independent.; (d) 1=nonexistent and poorly enforced, 7=well defined and strictly enforced. Source: The Arab World Competitiveness Report 2005.

**Table A.2.14: Perceptions on Infrastructure, 2004**

	Overall infrastructure Quality	Railroad Infrastructure Quality	Port infrastructure quality	Air transport infrastructure quality	Quality of electricity supply	Telephone infrastructure quality	Technological Readiness	Quality of competition in the internet service provider sector
Tunisia	4.5	3.7	4.5	4.5	5.7	6.2	4.4	4.2
Morocco	3.6	3.9	4.4	4.4	5.4	6.1	3.2	3.7
Algeria	3.4	2.6	3.4	3.4	4.3	3.5	2.9	2.5

Notes: The perception scales ranges from 1 (poor) to 7 (among the world's best).

Source: The Arab World Competitiveness Report 2005.

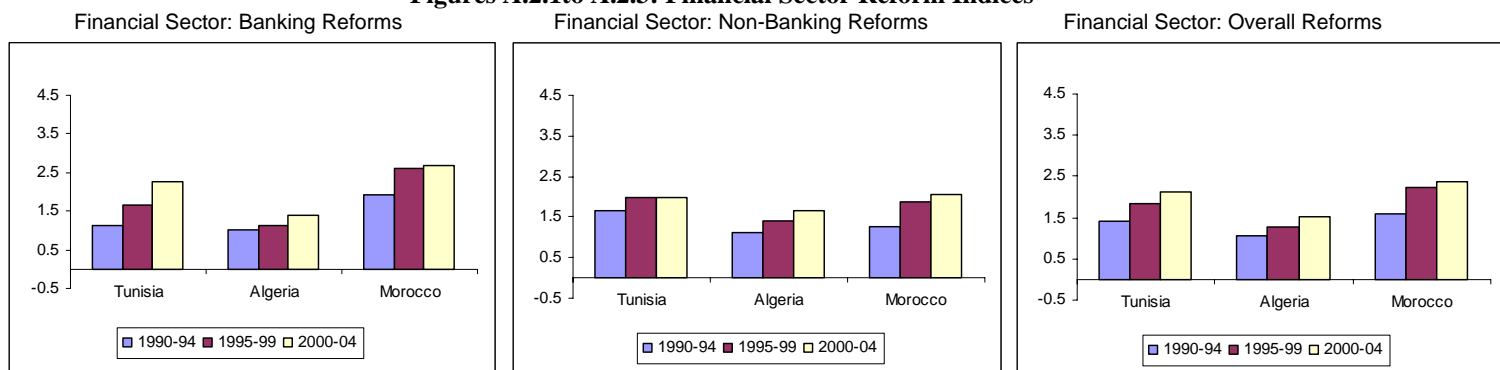
**Table A.2.15: Trade Logistics and FDI**

	Hidden trade barriers	Cost of importing foreign equipment	Business Impact of domestic trade barriers	Business impact of foreign trade barriers	Business impact of customs procedures	Efficiency of customs procedures	Openness of customs regime	Business impact of rules on FDI
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Tunisia	4.4	2.3	4.1	3.7	4.1	3.9	4.1	4.9
Morocco	4.3	2.6	4.5	4.3	4.1	4.1	4	4.7
Algeria	3.8	2.8	3.7	3.5	3.5	2.6	3.2	4.3

Notes: (a) 1=important problem, 7=not important problem; (b) in terms of import tariffs, quotas, license fees and bank fees 1=<10%, 2=11-20%, 3=21-30%, 9=>80%; (c)-(e) 1=damaging, 7=beneficial; (f) 1=slow and inefficient, 7=among world's most efficient; (g) 1=highly unfavorable to trade activities, 7=among world's most liberal trade regime; (h) 1=damaging, 7=beneficial.

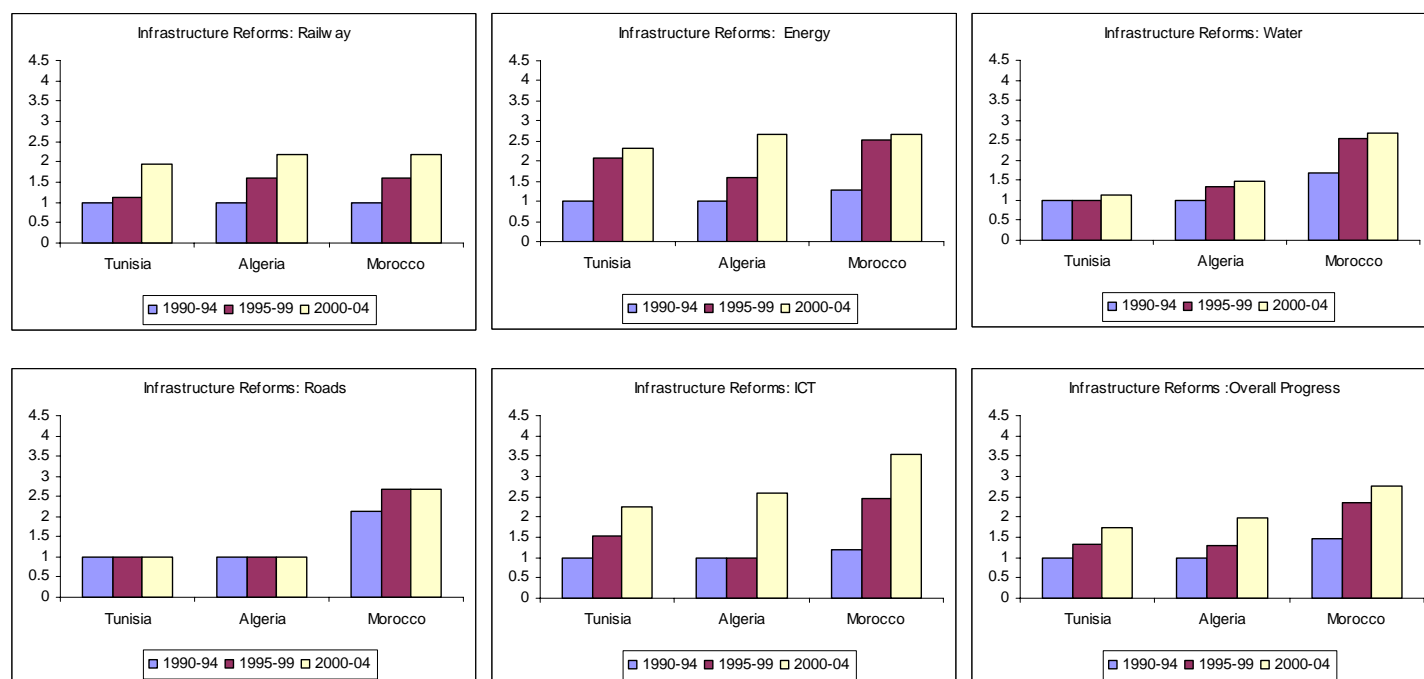
Source: The Arab World Competitiveness Report 2005.

**Figures A.2.1to A.2.3: Financial Sector Reform Indices**

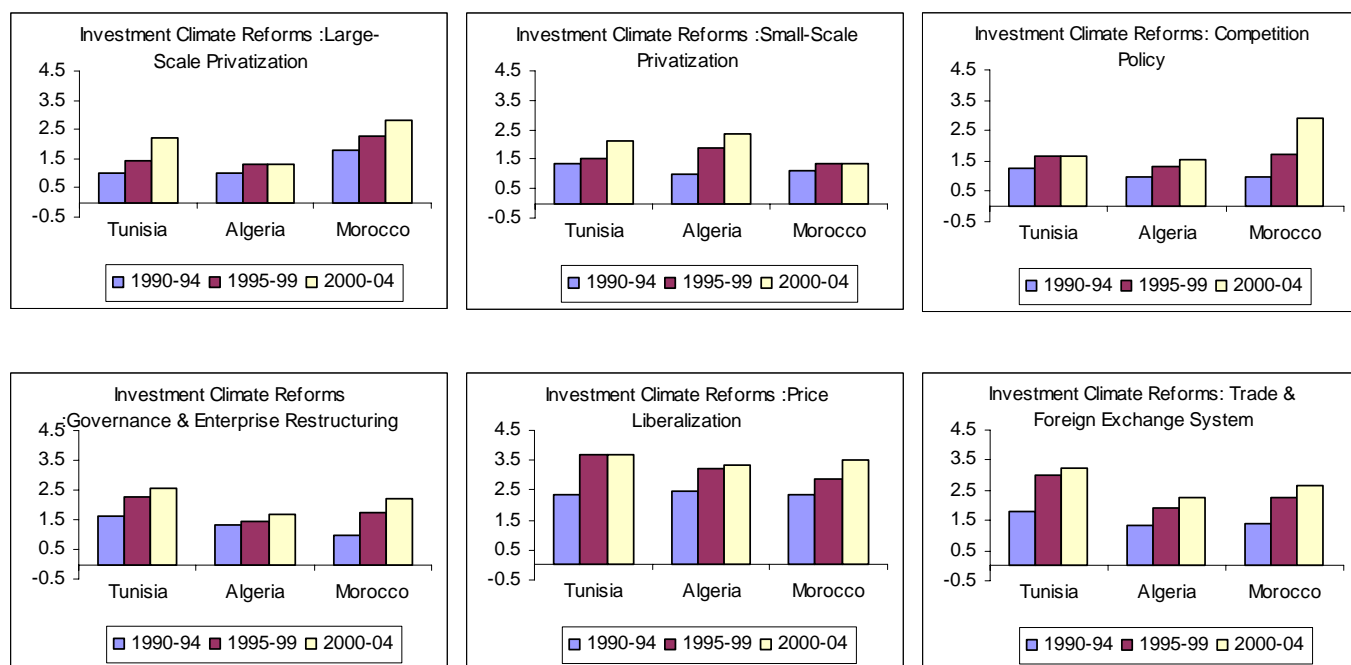


Source: Authors' construction using EBRD transition indicator methodology

**Figure A.2.4 to A.2.9: Infrastructure Reform Indices, 1990-2004**



**Figure A.2.10 to A.15: Investment Climate Reforms, 1990-2004**



Source: Authors' construction using EBRD transition indicator methodology



## C. Annex to Chapter 3:

**Table A.3.1: Predicted Path of Per-Capita Income with no-reforms, (constant 2000 USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1982	2035	2090	2146	2203	2262	2323	2385	2449	2514	2582	2651
Tunisia	2336	2419	2504	2592	2683	2777	2875	2976	3080	3189	3301	3417
Morocco	1349	1381	1414	1447	1482	1517	1554	1591	1629	1667	1707	1748
Maghreb	5667	5835	6007	6185	6368	6557	6751	6951	7158	7371	7590	7816

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.2: Predicted Path of Per-Capita Income with Maghreb Integration, (constant 2000 USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1982	2036	2090	2147	2204	2263	2324	2387	2451	2517	2584	2654
Tunisia	2336	2419	2504	2592	2684	2778	2876	2978	3083	3192	3304	3421
Morocco	1349	1381	1414	1448	1483	1518	1555	1592	1630	1669	1709	1750
Maghreb	5667	5835	6009	6187	6371	6560	6755	6956	7164	7377	7597	7824

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.3: Predicted Path of Per-Capita Income arising from RTA between Maghreb and EU (constant 2000 USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1982.4	2067	2155	2246	2342	2441	2545	2653	2766	2884	3006	3134
Tunisia	2336.5	2436	2539	2647	2760	2877	3000	3127	3260	3399	3543	3694
Morocco	1348.6	1406	1466	1528	1593	1661	1731	1805	1882	1962	2045	2132
Maghreb	5667	5908	6160	6422	6695	6979	7276	7585	7908	8244	8595	8960

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.4: Predicted Per-Capita Growth with Service Policy Reforms (percent)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	2.68	2.97	3.28	3.61	3.96	4.34	4.74	5.17	5.63	6.11	6.63	7.19
Tunisia	3.52	3.75	4.00	4.26	4.53	4.81	5.10	5.41	5.73	6.06	6.41	6.77
Morocco	2.39	2.62	2.87	3.13	3.40	3.68	3.97	4.28	4.60	4.93	5.27	5.63

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.5: Predicted Path of Per-Capita Income with Service Policy Reforms (constant 2000 USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1982.4	2041	2108	2184	2271	2369	2482	2610	2757	2925	3119	3343
Tunisia	2336.5	2424	2521	2629	2748	2880	3027	3191	3373	3578	3807	4065
Morocco	1348.6	1384	1424	1468	1518	1574	1637	1707	1785	1873	1972	2083
Maghreb	5667	5849	6053	6281	6537	6823	7145	7507	7915	8376	8898	9491

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.7: Predicted Path FDI stock with Service Liberalization and Investment Climate Reforms (billions USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	7.4	8.5945	10.032	11.81	14.04	16.84	20.411	25.01	30.991	38.869	49.37	63.55
Tunisia	18.0	19.341	20.977	22.92	25.23	27.99	31.299	35.3	40.15	46.079	53.373	62.41
Morocco	17.6	20.094	23.062	26.65	31.02	36.37	42.963	51.16	61.419	74.361	90.817	111.9
Maghreb	14.3	16.0	18.0	20.5	23.4	27.1	31.6	37.2	44.2	53.1	64.5	79.3

Source: Authors' calculation using WNDP, 2005 and WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.7: Predicted Path of Per-Capita Income from combined outcome of Maghreb RTA, Maghreb RTA with EU and Service Reforms, (constant 2000 USD)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	1982	2073	2173	2285	2410	2549	2705	2880	3076	3297	3546	3829
Tunisia	2336	2442	2557	2685	2826	2981	3153	3344	3555	3791	4053	4345
Morocco	1349	1409	1476	1549	1630	1718	1815	1922	2040	2169	2311	2469
Maghreb	5667	5924	6207	6519	6866	7249	7674	8146	8671	9256	9910	10644

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.8: Predicted Path of Non-Oil Export Value of forming Maghreb RTA (constant 2000 USD billions)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Tunisia	6.4	6.5	6.5	6.5	6.5	6.5	6.5	6.6	6.6	6.6	6.6	6.6
Morocco	7.3	7.3	7.4	7.4	7.4	7.4	7.4	7.5	7.5	7.5	7.5	7.5
Maghreb	16	16	16	16	16	16	16	16	16	16	16	16

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.9: Predicted Non-Oil Export Value with Maghreb RTA with EU (constant 2000 USD billions)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	2.1	2.3	2.5	2.7	3.0	3.3	3.6	4.0	4.4	4.8	5.3	5.8
Tunisia	6.4	7.1	7.8	8.5	9.4	10.3	11.3	12.4	13.6	14.9	16.4	18.0
Morocco	7.3	8.0	8.8	9.7	10.6	11.7	12.8	14.1	15.4	17.0	18.6	20.4
Maghreb	15.8	17.4	19.1	20.9	23.0	25.2	27.7	30.4	33.4	36.6	40.2	44.2

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

**Table A.3.10: Predicted Path of Real Non-Oil Export Value with Service Policy Reforms (constant 2000 USD billion)**

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Algeria	2.1	2.2	2.3	2.5	2.7	2.9	3.2	3.4	3.8	4.2	4.7	5.2
Tunisia	6.4	6.8	7.1	7.5	7.9	8.4	8.9	9.5	10.1	10.9	11.7	12.6
Morocco	7.3	7.7	8.1	8.5	9.0	9.5	10.1	10.8	11.5	12.3	13.2	14.3
Maghreb	16	17	18	19	20	21	22	24	25	27	30	32

Source: Authors' calculation using WDI, 2005. Note that Maghreb estimates are the sum of individual countries.

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