Current Issues

International topics

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North Africa – Mediterranean neighbours on the rise

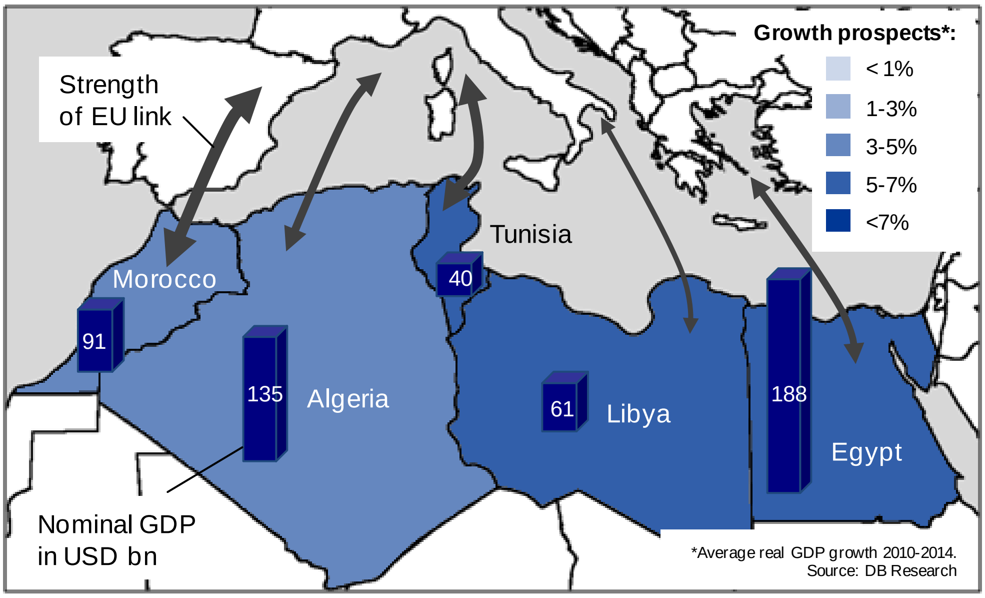
Why North Africa matters. The region comprising Algeria, Egypt, Libya, Morocco and Tunisia has strong economic potential underpinned by solid growth prospects, its favourable strategic location at the crossroads of three continents, abundant energy resources, strong EU links and growing financial sectors.

Stable macroeconomic setting. Healthy external finances, manageable public debt levels and stable monetary regimes set the stage for strong future growth. A backlog of structural reforms, high unemployment and a relatively weak business and investment climate are the main obstacles to economic prosperity.

Links to the European Union expected to intensify. With institutional underpinning from trade agreements, the EU is set to remain the most important trading partner for all five countries. FDI links might be strengthened via further privatisations and diversification of the EU's energy supplies. The process of political integration with the EU will run at different speeds based on the countries' relative dependence on the EU, with Morocco expected to go fastest.

Financial sector most developed in Egypt and Morocco. Given their low dependence on external funding and high level of state ownership the North African banking sectors weathered the global crisis well. However, they still suffer from high levels of NPLs and inefficient financial intermediation. Banking sector development and reform efforts are strongest in Egypt and Morocco. Those two countries also have the deepest and most liquid equity and bond markets.

Further reforms key to foster growth. In order to fully unleash their growth potential the five countries have to continue to diversify their economies, increase their regional integration, reduce subsidies and labour skill mismatches, and provide easier access to credit for the private sector.



*Average real GDP growth 2010-2014.
Source: DB Research

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Authors
Marion Mühlberger
+49 69 910-31815
marion.muehlberger@db.com

Marco Semmelmann
+49 69 910-31711
marco.semmelmann@db.com

Editor
Maria Laura Lanzeni

Technical Assistant
Bettina Giesel

Deutsche Bank Research
Frankfurt am Main
Germany
Internet: www.dbresearch.com
E-mail: marketing.dbr@db.com
Fax: +49 69 910-31877

Managing Director
Thomas Mayer

North Africa's[1] (Algeria, Egypt, Libya, Morocco and Tunisia) favourable strategic location at the crossroads of three continents, its abundant energy resources, intensive EU links and growing financial sectors are turning it into a region with strong economic potential. In this study we first provide an economic overview of the five North African countries, presenting the main structural characteristics and including the macroeconomic and political settings. Then we shed some light on how strong their linkages to the European Union are. Moreover, we take a closer look into two vital parts of these economies – the financial and the energy sectors. We conclude our study by assessing the economic potential of the five countries by ranking them in an emerging markets context.

Economic overview

Strong growth potential but low income levels

North Africa enjoyed six years of 5% real GDP growth on average from 2003 to 2008. Growth was driven by private consumption, strong public spending and investment, and robust export revenues fuelled by record harvests, a surge in oil prices and tourism receipts. Compared to other emerging market regions the North African countries also proved resilient in the global economic crisis (see chart 1). Real GDP growth slowed down only slightly to around 4% yoy. The main reasons for this resilience were the countries' relatively low trade openness, the strong role of the public sector and low dependence on foreign capital inflows. In addition, counter-cyclical fiscal programmes, especially in Egypt and Morocco, have also supported growth.

Over the next few years strong domestic demand coupled with a recovery in exports are likely to boost real GDP growth back to pre-crisis levels of 4-6% p.a.(see chart 2). Domestic demand will mainly be driven by strong investment programmes and continued expansionary fiscal policy. Net exports will receive positive growth impetus from high commodity prices (oil, gas and phosphates), increased tourism revenues and goods exports due to the economic recovery being seen by the main trading partners.

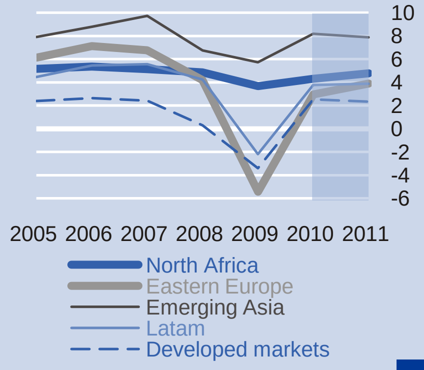
In tandem with strong real GDP growth, per capita wealth will also continue to rise. Although income levels are still below those of peers like Poland or Turkey (see chart 3), we expect them to grow by 3-4% in real terms every year over the next few years (see chart 2). In terms of attractiveness of the domestic market for foreign investors, Egypt clearly stands out with its nominal GDP of USD 190 bn (see chart 4) and booming real GDP growth.

Ongoing economic diversification and privatisation

With the hydrocarbon sector accounting for 71% and 45% of total GDP in Libya and Algeria, respectively, their economies are highly concentrated and vulnerable to oil and gas price movements. By contrast, in Egypt, Morocco and Tunisia agriculture still accounts for some 11-13% of GDP and employs up to 42% of the workforce, which makes GDP dependent on climatic conditions. But especially Tunisia and Morocco seem to be on the right track in terms of diversification of their product base. In terms of export dependence both countries have succeeded in reducing their dependence on the

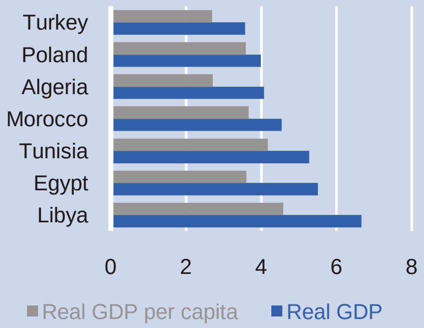
[1] North Africa is defined as those five countries in our study.

Resilient North Africa
Real GDP growth, % yoy



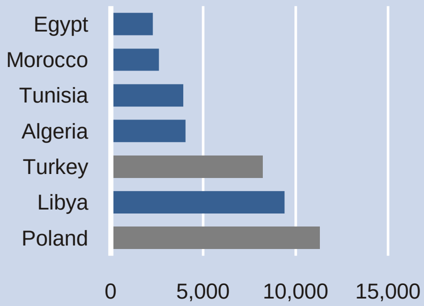
Sources: IMF, DB Research **1**

Solid growth prospects
Average growth rate, 2010-2014



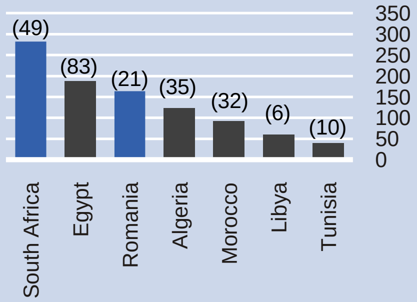
Sources: IMF, DB Research **2**

Strong catch-up potential
GDP per capita in USD, 2009



Sources: IMF, DB Research **3**

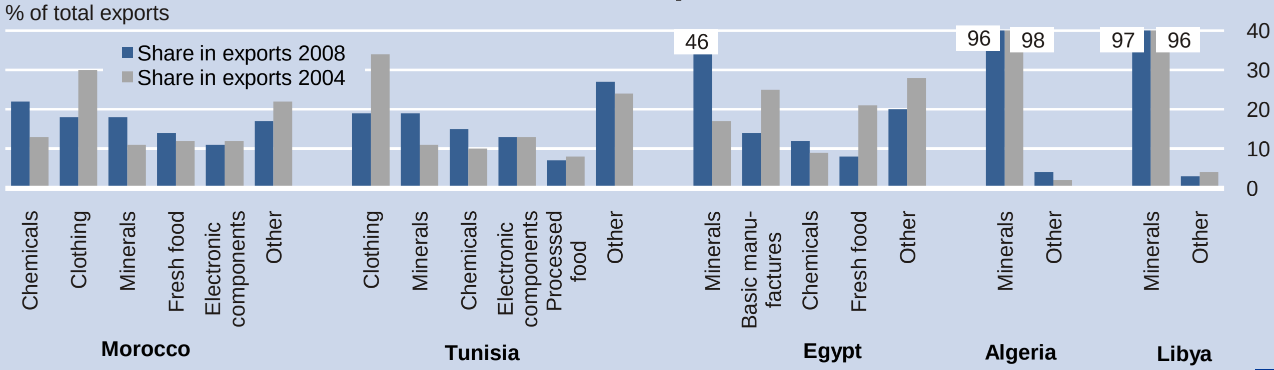
Egypt has the largest domestic market
Nominal GDP in 2009, USD bn*



*Data in brackets is population in m.

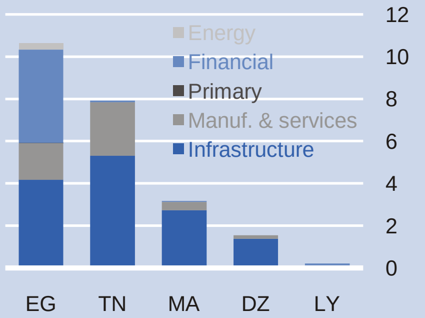
Sources: IMF, DB Research **4**

Morocco and Tunisia have most diversified export structure
% of total exports



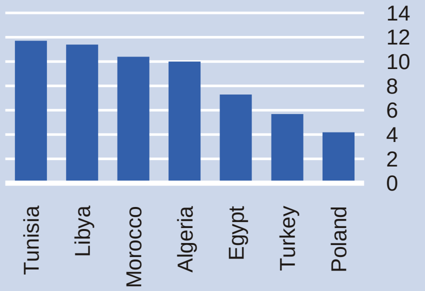
Sources:International Trade Centre, DB Research 5

Egypt ahead in privatisations
Value of transactions from 2000-2007, USD bn



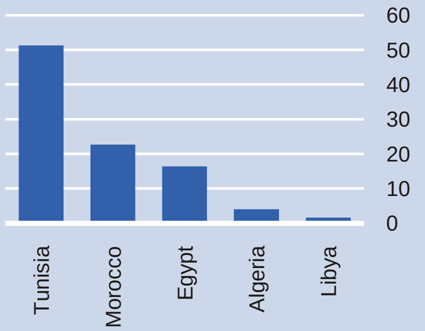
Sources: World Bank, DB Research 6

Inefficient public sector
Central government wages, in % of GDP



Sources: IMF, Nat. statistical offices, DB Research 7

Low external debt levels
Total external debt in % of GDP, 2009



Source: DB Research 8

textiles industry and have built up their chemical (esp. phosphate) and electrical and mechanical engineering industries. In both countries, clothing has declined from around 30% of total goods exports in 2004 to below 20% in 2008 (see chart 5). Moreover, Morocco has become an important business process offshoring centre for French and Spanish firms.

The ongoing privatisation process is also contributing to structural change. Privatisation efforts are strongest in Egypt with 48 transactions amounting to USD 10 bn taking place from 2000 to 2007 (see chart 6), and several state-owned enterprises remain on the privatisation lists in the region. According to national privatisation agencies, Tunisia plans to privatise its reinsurance company, petrol distribution and sugar producer, while Morocco intends to sell enterprises in the textiles industry, salt production and telecommunication sector this year.

Since studies have found that rent-seeking behaviour constitutes one of the most binding constraints to economic development in North Africa, one key to further unleash the growth potential of the five North African countries lies in increasing the efficiency of the public sector.[2] Using central government wage expenditure as a percentage of GDP as a proxy for the burden of the public sector on the economy shows that the public sector is more onerous in North Africa than in peers like Poland or Turkey (see chart 7). The further reduction of extensive subsidy systems (accounting for 2% of GDP in Morocco, 3.7% in Libya and 5.4% in Egypt) is an additional step to streamline the public sector and reduce fiscal risks and already stands on the agenda of the authorities.

Manageable economic and political risks …

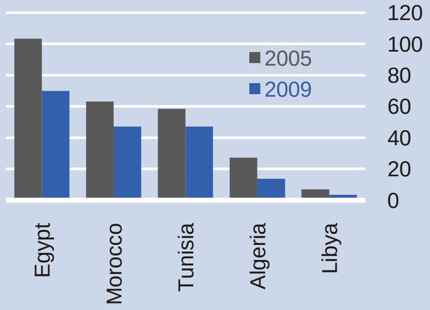
Good macroeconomic management bodes well for macroeconomic stability in North Africa. External finances are healthy as current account balances are either in surplus or mostly financed by FDI inflows and external debt remains at low levels in most of these countries (see chart 8). Moreover, public debt has continued to decline (see chart 9), although it remains significant at 50-70% of GDP in Egypt, Morocco and Tunisia.

Managed exchange rates, high government subsidies on food and fuel, and prudent monetary policy helped to keep inflation contained in recent years. Only Egypt faced double-digit inflation in 2008, which provoked a series of strikes and the demand for further wage

[2] Brach (2008). Constraints to Economic Development and Growth in the Middle East and North Africa. GIGA. September 2008.

Still high public debt levels in non-oil economies

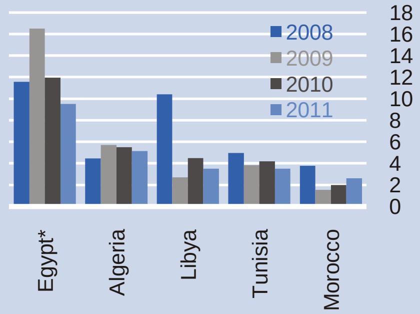
Public debt in % of GDP



Source: DB Research **9**

Only Egypt faced double-digit inflation

% yoy

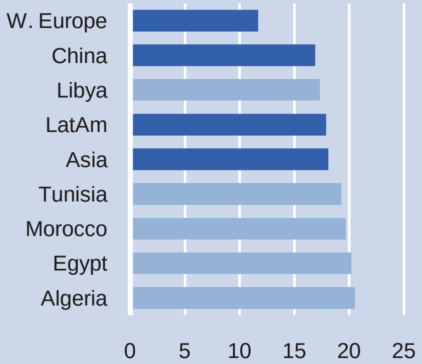


*Fiscal year data.

Sources: IMF, DB Research* **10**

Big pool of young workforce

Population aged 15-24 in % of total, 2010



Sources: United Nations, DB Research **12**

Weak business climate

Doing Business Report country ranking

	2010 rank	2009 rank
Saudi Arabia	13	15
Tunisia	**69**	**73**
Poland	72	72
Turkey	73	63
Egypt	**106**	**116**
Morocco	**127**	**130**
Algeria	**136**	**134**
Libya	**n.a.**	**n.a.**

Source: Doing Business report 2010 **13**

increases. Over the next two years we expect inflation to decrease to the single-digit level in Egypt and remain at current low levels in all other countries (see chart 10).

The degree of political stability remains relatively high in North Africa. All five North African heads of state have ruled their countries for at least a decade (see chart 11). They dominate the political scene and political power is strongly concentrated in their hands. The biggest risk to political stability is the lack of clear succession plans in all countries with the exception of Morocco. This succession question is most acute in Egypt as President Mubarak is 81 years old and presidential elections are scheduled for 2011.

North African governments

Morocco	
Head of state	Mohammed VI. (since 1999)
Head of government	Abbas El Fassi (since 2007)
Algeria	
Head of state	Abdelaziz Bouteflika (since 1999)
Head of government	Ahmed Ouyahia (since 2008)
Tunisia	
Head of state	Zine El Abidine Ben Ali (since 1987)
Head of government	Mohamed Ghannouchi (since 1999)
Libya	
Head of state	Muammar Al-Gaddafi (since 1969)
Head of government	Al-Baghdadi Ali Al-Mahmudi
Egypt	
Head of state	Muhammad Husni Mubarak (since1981)
Head of government	Ahmad Mahmud Muhammad Nazif (since 2004)

Source: German Federal Foreign Office **11**

… but high unemployment and weak business climate

Labour skill mismatches and shortages are found to have a significant negative effect on growth in North Africa.[3] Thus, labour market reform and the reduction of high unemployment rates (ranging from 9% in Egypt to 14% in Tunisia) are amongst the biggest challenges facing the governments. Unemployment is particularly acute among the youth. In Algeria, for example, 75% of the unemployed are less than 30 years old and 90% are under 35 years. As around 20% of the total population are aged 15-24 (see chart 12), education, flexibilisation of labour markets and improvements in the business climate should be made a top priority by all governments in order to prevent mass youth unemployment. Unemployment insurance, which could significantly cushion the impact of economic shocks, is only available in a handful of countries, including Algeria and Egypt.[4]

An additional obstacle to private sector growth and foreign investment is the relatively weak governance and business climate. While Tunisia ranks close to some Eastern European countries like Romania and Poland in the Doing Business Ranking, all other countries show up only in the second lowest quintile (see chart 13).

Relatively high corporate tax rates in Libya, Tunisia and Morocco (see chart 14) also decrease the attractiveness of those countries as

[3] Bhattachary and Wolde (2010). Constraints on Growth in the MENA region. IMF Working Paper.
[4] World Bank (2009). Economic Developments and Prospects.

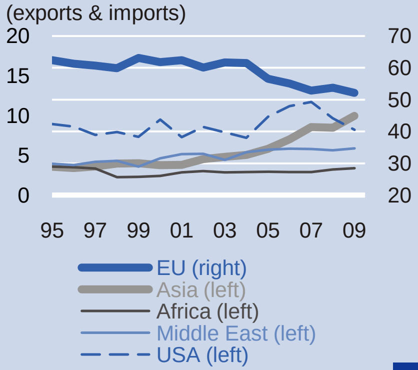
Relatively high corporate tax rates

Corporate tax rate, % in 2009

Sources: KPMG, DB Research 14

EU's trade share highest

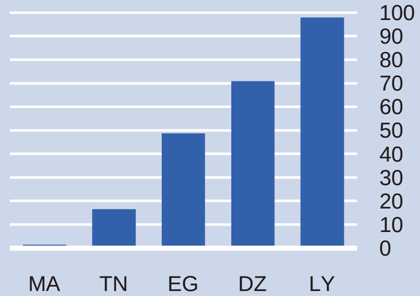
% of total North African trade (exports & imports)



Source: IMF DOTS 15

Share of energy exports high

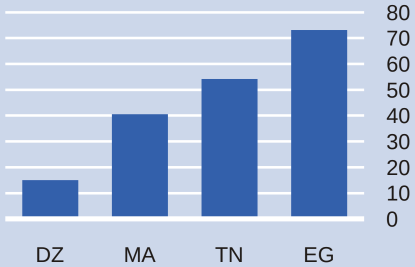
Energy exports (SITC 3) as % of total exports



Source: Eurostat 16

Most tourists come from the EU

Share of EU-27 tourists in % of total tourists



Most recent available data point (range 2004-2006) is shown. Share of receipts/income from tourism are possibly higher.

Source: Eurostat 17

a destination for foreign direct investments. In addition, further trade liberalisation (e.g. import tariff reductions) would integrate them more fully in global trade flows. Average trade-weighted import tariffs on machinery have already fallen from 16% to 11% in Egypt, from 15% to 7% in Morocco, from 18% to 16% in Tunisia and from 12% to 11% in Algeria since 2002.

How strong are the links to the EU?

The European Union is the biggest economic bloc neighbouring the five North African countries and thus a natural economic and political partner for them. In this chapter we look into four aspects of North Africa's links to the European Union (trade, FDI, migration and politics) in order to assess how strong these links are and derive potential trends.

Strong trade integration with the EU

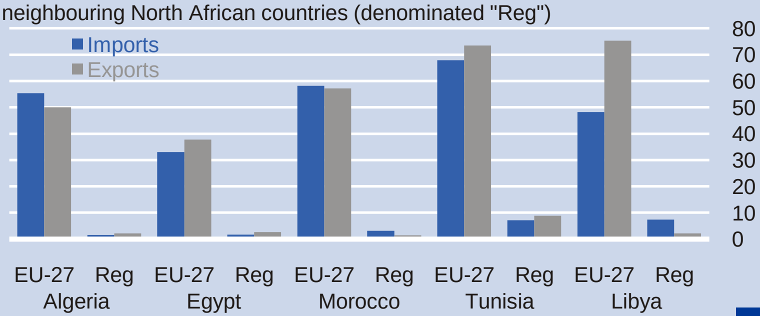
Accounting for 53% of total trade the EU-27 is by far the most important trading partner for North Africa (see chart 15). This also holds true at an individual country level, as in all countries more than 30% of total trade is conducted with the EU-27. Institutionally, ties with the EU have been enforced through trade agreements that came into effect over the last ten years or so (see chart 23). Although trade with Asia and the Middle East has picked up in recent years we expect the EU to maintain its dominant position given its geographical proximity, the ongoing trade integration and the EU's strong demand for energy.

Mirroring the structure of their economies, Libyan and Algerian exports to the EU are dominated by hydrocarbons (see chart 16). In addition to hydrocarbons, Egypt also exports manufactured goods, while Tunisia exports primarily textiles and machinery. Morocco's exports are the most diversified in the region, consisting of machinery, textiles and agricultural products. Regarding imports, machinery accounts for 35-45% of the total, followed by manufactured goods and chemicals for Egypt and Algeria. Trade in services (i.e. tourism) also constitutes an important link to the EU for Egypt, Tunisia and Morocco with 40-70% of tourists coming from the EU (see chart 17).

While trade integration with the European Union remains strong, regional integration is still low. Intra-North-African trade accounts for less than 10% of total trade in all five countries (see chart 18).

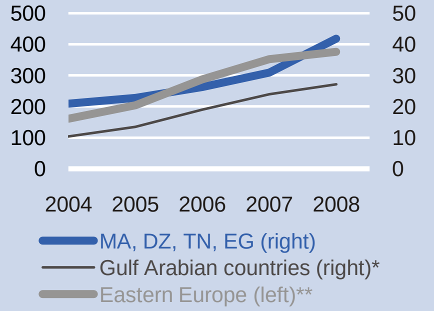
Trade with EU-27 dominates, regional trade small

% of total trade of the respective North African country with EU-27 and with neighbouring North African countries (denominated "Reg")



Sources: Eurostat, IMF 18

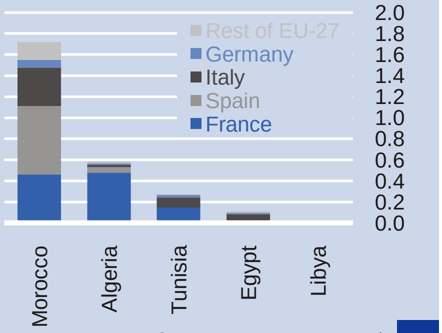
FDI from the EU: Rising from a low base
Stock of EU-15 FDI, EUR bn



*AE, BH, IQ, KW, OM, QA, SA, YE
**Until 2005 NMS-10, then NMS-12

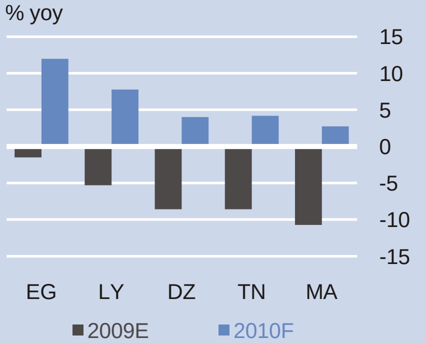
Source: Eurostat **19**

Moroccans form the largest group of EU immigrants
Foreign citizens in the EU-27 in m



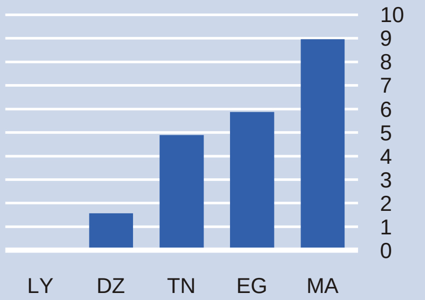
Sources: Eurostat, DB Research **20**

Morocco faced largest drop in remittances
% yoy



Source: IMF **21**

Dependency on remittances varies greatly
Remittances as % of GDP, as of 2007



Source: World Bank **22**

The Agadir Free Trade Agreement signed between Tunisia, Morocco, Jordan and Egypt in 2004 has been a first step to foster intra-regional trade.

Mixed FDI links

While Morocco and Tunisia have very strong FDI links to the EU, the US is the most important foreign investor in Egypt and Libya. From the EU's perspective North Africa has not yet become a real magnet for FDI, as North Africa only receives a very small part of overall EU-15 outward FDI. North Africa's EU-FDI stock is almost twice that of the Gulf countries. But it is dwarfed by the EU-FDI stock in Central Eastern Europe (see chart 19), which is not surprising given that those countries are part of the EU. In terms of source countries, France, the UK and Spain are the most important European investors in North Africa (excl. Libya).

In Libya, Algeria and Egypt FDI flows primarily into the hydrocarbon sector. In Tunisia it is focused on the energy sector and the manufacturing industry, while in Morocco FDI flows into the tourism, real estate and industrial sectors.

Strong economic growth prospects, demand for energy, further privatisations and improvements in the business environment will likely contribute to rising FDI inflows from the EU in the future.

Migration/remittances link is strongest in Morocco

Morocco stands out as the North African country with the highest relative and absolute stock of emigrants to the EU (see chart 20). France, Spain and Italy are the most important EU destinations for North African immigrants. In 2008, 1.7 m Moroccans lived in the EU-27, forming the second most-sizeable immigrant population after the Turks. For all North African countries, persistent income gaps and to a lesser extent slowly progressing democratisation are likely to continue to drive emigration over the next few years.

As a consequence of the strong migration link to Europe, remittances of the five countries were hit by the economic recession in Europe. According to a recent study by the IMF[5], the drop in remittances for Morocco, Algeria, Tunisia and Libya is estimated at between 2% and 11% in 2009 (see chart 21). As remittances account for almost 10% of GDP in Morocco (see chart 22), Moroccan GDP growth is estimated to have dropped by 1.1 to 2 percentage points due to the fall in remittances. As soon as the European labour market picks up, we expect remittances to return to single-digit growth.

Political integration with the EU is running at different speeds

The fourth aspect, the political link, is driven by the EU's goal to be surrounded by a politically stable and economically successful ring of neighbouring countries, and by North African countries' interest in access to the EU's single market.

In 1995 the EU initiated the **Euro-Mediterranean Partnership** (also known as the Barcelona Process) in order to strengthen bilateral relations including the gradual establishment of a free-trade area by 2010. Within this framework all countries but Libya have concluded association agreements (see chart 23) aiming to foster regular political dialogue, trade liberalisation and economic cooperation

[5] Barajas et al. (2010). The Global Financial Crisis and Workers' Remittances to Africa: What's the Damage? IMF Working Paper.

(e.g. liberalisation of services, free movement of capital, competition rules, intellectual property rights and public procurement).

Complementing and building on the Euro-Mediterranean Partnership the **European Neighbourhood Policy** (ENP) was created in 2004. It applies to all immediate neighbours by sea or land of the EU[6] and its basic idea is to offer the countries a privileged partnership with the EU[7] including trade preferences and financial assistance. A core instrument of the ENP is bilateral Action Plans (agreed in North Africa so far by Egypt, Morocco and Tunisia) which define an agenda of political, economic and sectoral reforms and whose implementation is regularly monitored.

During France's EU presidency in 2008 the **Union for the Mediterranean** was founded, which can be seen as a re-launch of the Euro-Mediterranean partnership. It comprises all 27 EU member states and the 16 partners in the Mediterranean (with Libya as an observer only) and the Middle East.[8] There are six priority projects, e.g. the establishment of maritime and land highways, de-pollution of the Mediterranean Sea, a solar energy plan for the Mediterranean and civil protection initiatives in order to combat man-made and natural disasters. The major aim is to raise the political profile of the important partnership with the southern neighbours of the EU.

Libya is the only country without an EU agreement

	Association Agreement	Action Plan	WTO member
Egypt	2004	2007	1995
Morocco	2000	2005	1995
Tunisia	1998	2005	1995
Libya	none	none	in process
Algeria	2005	none	in process

Source: DB Research 23

Overall, we expect the future political integration process with the EU to run at different speeds based on the countries' relative dependence on the EU. Morocco, on the one hand, was upgraded to having an "advanced status" with the EU in October 2008 which means increased financial support, a strengthening of political cooperation and a further liberalisation of trade in services. Libya, on the other hand, has not concluded an association agreement with the EU yet and is an observer in the Euro-Mediterranean partnership only (see chart 23). One contentious issue that remains is how far and deep should political matters (i.e. improvement of democratic standards) in addition to economic matters be included in this process.[9]

Focus on the financial sector

Banking sector: Ongoing reform process

Given their low dependence on external funding and high level of state ownership the North African banking sectors weathered the global crisis well. However, they still suffer from high levels of NPLs and ineffective financial intermediation as high government financing needs constrain private-sector lending. Banking sector reform is progressing with Egypt and Morocco showing the strongest reform efforts.

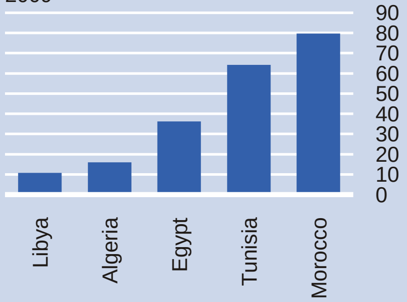
[6] Algeria, Armenia, Azerbaijan, Belarus, Egypt, Georgia, Israel, Jordan, Lebanon, Libya, Moldova, Morocco, Palestinian Authority, Syria, Tunisia and Ukraine.

[7] Bendiek, Annegret (2008). Wie effektiv ist die europäische Nachbarschaftspolitik? Stiftung Wissenschaft und Politik (SWP).

[8] Egypt, Albania, Algeria, Bosnia & Herzegovina, Israel, Jordan, Croatia, Lebanon, Libya, Morocco, Mauretania, Montenegro, Palestinian Authority, Syria, Tunisia, Turkey.

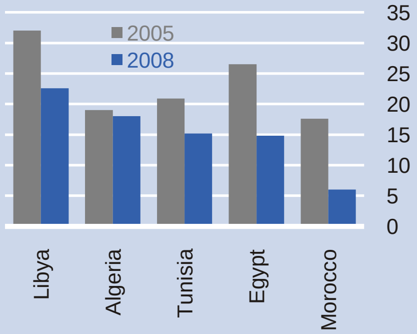
[9] Bendiek, Annegret, op. cit. Kausch, Kristina and Richard Youngs (2009). The end of the 'Euro-Mediterranean vision'. International Affairs 85. Vol. 5.

Highest financial depth in Morocco
Credit to the private sector, % of GDP, 2009



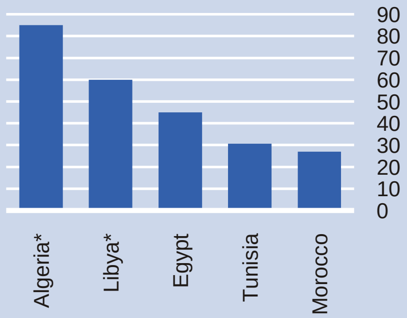
Sources: IMF, DB Research **24**

Still high levels of NPLs
NPLs in % of total loans



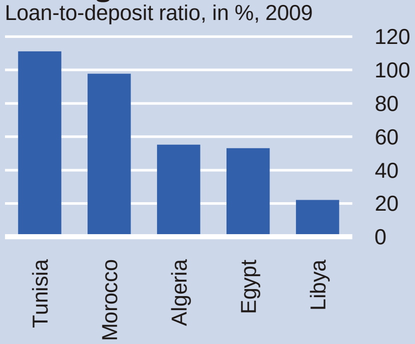
Sources: IMF, IIF, National Central Banks **25**

High state ownership in Algeria, Libya and Egypt
% of total banking sector assets, 2009



*Data as of 2008.
Sources: Fitch, IIF **26**

Sufficiently large domestic funding base
Loan-to-deposit ratio, in %, 2009



Sources: National central banks, IIF, DB Research **27**

Differing degrees of financial intermediation

While financial intermediation stands at fairly high levels in Morocco and Tunisia, there is still considerable scope for financial deepening in Egypt, Algeria and Libya (see chart 24). In Morocco, strong credit growth (23% on average in 2007-2009) has led to a strong increase in financial intermediation to around 80% of GDP. In Libya and Algeria more effective financial intermediation would help to channel the large savings into private-sector investment and spur growth. The increase of minimum capital requirements for banks, the setting up of credit bureaus and the promotion of mortgage loans and loans to SMEs should help to increase lending to the private sector.

High level of non-performing loans

As a legacy of state-directed lending – especially in the tourism sector and agriculture – and past credit booms in some countries, non-performing loans stood at 15-30% of total loans in all countries in 2005. The clean-up of the banks' balance sheets (by writing off fully provisioned NPLs) and restructuring of problem loans has led to a substantial reduction of NPLs, especially in Morocco and Egypt (see chart 25). The authorities are committed to reducing them further by setting clear objectives for NPLs and provisioning ratios (e.g. Tunisia), setting up a credit bureau (e.g. Morocco) and creating bad banks (e.g. Libya).

High level of state ownership

Despite recent privatisations state ownership in the banking systems remains relatively high, ranging from 27% in Morocco to 85% in Algeria (see chart 26). In Algeria, the three largest state-owned banks still hold a majority market share. In Libya, authorities sold 19% of the stakes of two of the biggest state-owned banks to BNP Paribas and Arab Bank in 2007 and 2008 and further privatisation of the still largely state-owned banking sector is expected. In Egypt, privatisation is moving forward and private banks now own the majority of assets. Is is not clear yet, however, whether the postponed privatisation of Banque du Caire will go ahead this year. In Tunisia, three of the five largest banks are still state-owned. The latest privatisation took place in 2007 (Banque Tuniso-Koweïtienne) and the government is expected to resume privatisation soon (Banque Franco-Tunisienne).

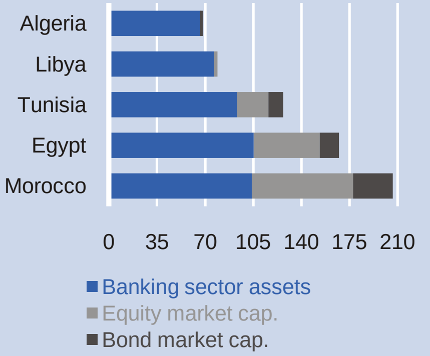
Low dependence on external funding

Loan to deposit ratios range from 22% in Libya to 111% in Tunisia (see chart 27). This low dependence on external funding insulated them from the recent financial crisis as it limited contagion from any reduction in cross-border bank lending. In Algeria, Egypt and Libya any future acceleration of credit growth can be easily funded with domestic deposits, while Tunisia and Morocco might have to rely more on external funding for future credit growth.

Improvements in supervision and regulation

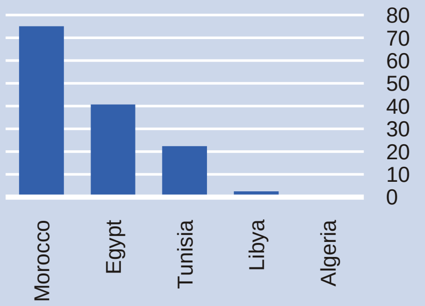
According to IMF-World Bank assessments on countries' compliance with international regulatory standards and progress in Basel II implementation, Morocco performs best. But in all countries the authorities are making progress in improving the regulatory and supervisory environment. In Tunisia, the authorities' capacity for risk assessment has improved and preparatory work for Basel II is completed, but its implementation is not yet fully planned. In Morocco, the authorities continue to improve their capacity in stress testing and macro-prudential analysis. Moreover, implementation of

Mostly bank-dominated financial systems
% of GDP, 2009



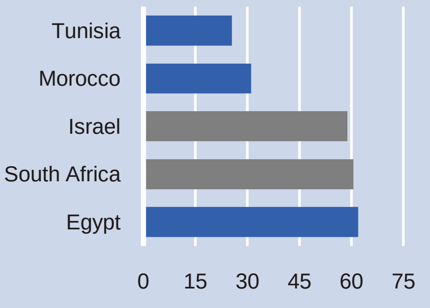
Sources: National authorities, DB Research 28

Depth of stock markets varies greatly
Market capitalisation in % of GDP



Sources: Bloomberg, National Stock Exchanges 29

Egypt has the most liquid stock market
Turnover ratio, %



Source: World Development Indicators 30

Basel II continues. In Egypt, authorities will enter the second phase of banking-sector reforms, focusing on the implementation of Basel II. In Libya, supervision continues to be strengthened from a weak level by improving supervisory reporting and on-site supervision procedures and reforming the specialised credit institutions. In Algeria, authorities focus on measures to improve transparency and financial reporting of banks.

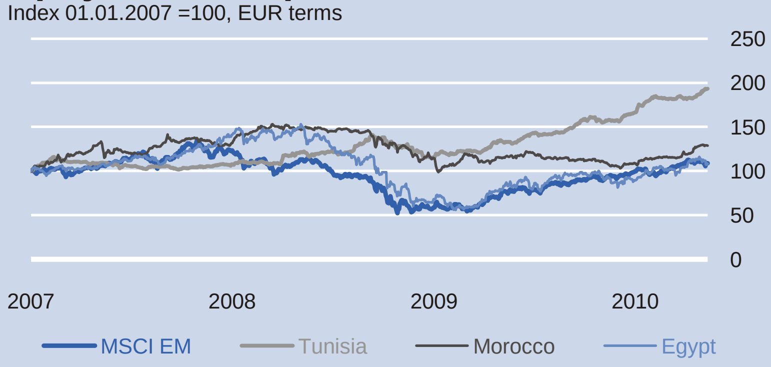
Capital markets: Different levels of development

The financial systems of Algeria, Libya and Tunisia are mostly bank-dominated and capital markets play a subordinate role. The Egyptian and Moroccan capital markets, however, are relatively well developed and contribute significantly to financing the economy (see chart 28).

Equity markets: Egypt and Morocco have deepest and most liquid markets

The size, depth and liquidity of stock markets vary greatly in North Africa. With a stock market capitalisation of above 50% of GDP (see chart 29) and a turnover ratio comparable to that of South Africa or Israel (see chart 30), Egypt and Morocco have fairly deep and liquid stock markets. As the two countries are among the 22 in the MSCI Emerging Markets index, they are on the radar screens of not only local but also international institutional investors. Tunisia displays the classical features of a so-called frontier market, which means that the equity market has reached a certain stage of development but is not considered an emerging market yet. Algerian and Libyan stock markets have only been established recently (Algeria in 1993 and Libya in 2008) and are characterised by a low number of listed companies and thin trading volumes. Given their small size, lack of liquidity and difficult market access, they will in the foreseeable future remain niche markets in the eyes of international fund managers. Overall, the performance of North African stock markets has been strong in recent years with all three major markets outperforming the MSCI EM index in EUR terms (see chart 31). Privatisation of state firms, robust real GDP growth, low domestic interest rates, and strong inflows of foreign investments should increase the attractiveness of North Africa's stock markets.

Equity markets outperform the MSCI EM
Index 01.01.2007 =100, EUR terms

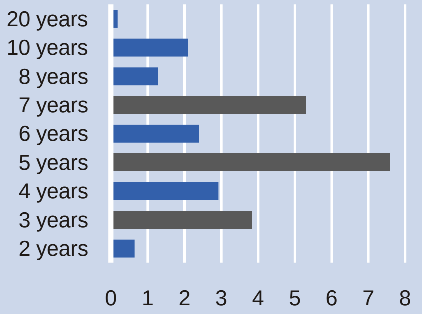


Sources: Bloomberg, DB Research 31

Government bond markets: Government financing needs drive growth

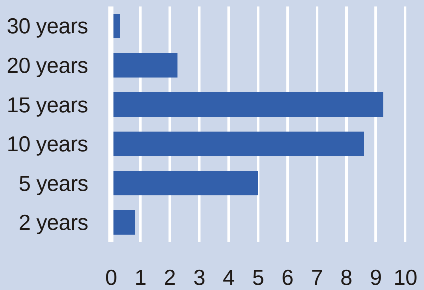
In contrast to the stock markets, bond markets were only established in the mid-nineties, but have since grown strongly. Local

Egypt: 3-, 5- and 7-year are the dominant maturities
EGP bn



Sources: Egyptian Min. of Finance, DB Research 32

Morocco: The bulk of bonds has a maturity of 10 or 15 Y
Bonds outstanding, USD bn, 2008



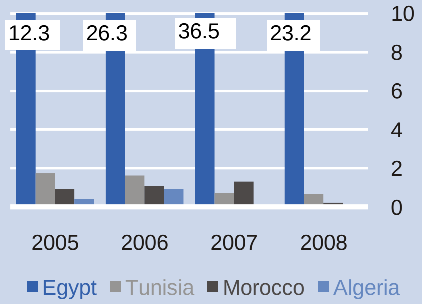
Sources: Finance Ministry of Morocco, DB Research 33

Algeria lacks sov. rating

	S&P	Fitch	Moody's	First rated
Egypt	BB+	BB+	Ba1	1997
Morocco	BB+	BBB-	Ba1	1998
Tunisia	BBB	BBB	Baa2	1995
Libya	A-	BBB+	na	2009
Algeria	na	na	na	na

Source: DB Research 34

Egypt is by far the most liquid bond market
Annual debt trading volume, USD bn



Sources: EMTA, DB Research 35

bond markets are most developed in Egypt, Tunisia and Morocco. All three countries have a fairly high level of public debt and the state relies on bond issuance to fund its chronic fiscal deficit (see further details below). In Algeria, the domestic bond market is still in its infancy, while there is no bond market yet in Libya. Overall, we expect high government funding needs and the growing size of local institutional investors to drive local bond markets growth over the next few years.

Egypt: In the course of the broad financial-sector reform drive that started in 2004, Egyptian debt management also underwent significant changes. These changes include the creation of a regular issuance calendar and the gradual issuance of longer and larger treasury bonds in order to lengthen the average maturity of the outstanding debt stock. Currently, domestic government bonds outstanding total USD 26 bn and 3Y, 5Y and 7Y paper are the dominating maturities (see chart 32). According to the new 2010 debt issuance strategy the Egyptian finance ministry will focus on the issuance of benchmark maturities (3, 5, 7 and 10 years) and increase the standardisation of debt issuance.

Morocco: At the end of 2008 domestic bonds outstanding amounted to USD 26 bn with the majority of bonds having a maturity of 5 or 10 years (see chart 33). The bulk of domestic government bonds is held by local banks, insurance companies and mutual funds. The secondary market is relatively liquid.

Tunisia: Since 1997 Tunisia regularly issues government bonds with maturities ranging from 2 to 12 years. Last year Tunisia issued bonds worth USD 0.5 bn. Total outstanding government bonds amounted to USD 4.3 bn at the end of 2009. Foreign investors are only allowed to purchase up to 10% of the estimated semi-annual volume of treasury bonds.[10]

International bond markets are generally less developed than local bond markets. External issuance started in the mid-1990s, with Tunisia being the first country in North Africa to receive a sovereign credit rating (see chart 34). Currently, both Egypt and Morocco have few international bonds outstanding (Egypt: two 10Y USD 1 bn bonds and one 30Y USD 0.5 bn bond; Morocco: one EUR 0.5 bn bond). Tunisia is a regular issuer in USD or JPY-denominated international bonds with maturities ranging from 2-30 years. In terms of overall trading volumes Egypt clearly stands out with its annual average ranging between USD 25 and 35 bn (see chart 35).

Energy sector

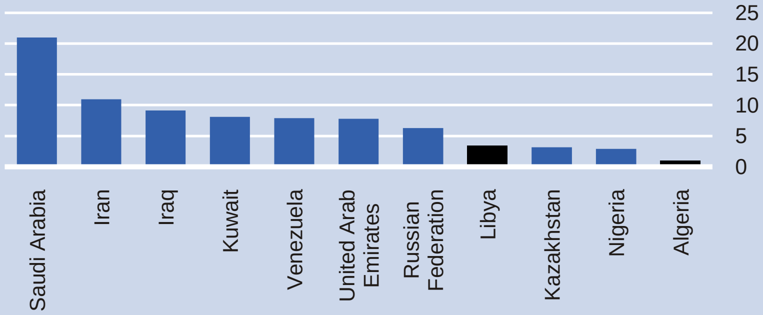
Abundant oil and gas resources

Rising energy demand globally raises the attractiveness of North Africa given that the region is well equipped with fossil and renewable energy resources. On a global scale, North Africa accounts for 4.8% of total world oil reserves.[11] Holding 3.5% of global oil reserves, Libya features among the world's top-10 oil countries (see chart 36). In terms of natural gas reserves North African countries account for 4.4% of world reserves, with Algeria accounting for 2.4%, Egypt for 1.2% and Libya for 0.8%.

[10] African Development Bank, African Fixed Income Guidebook, May 2007.
[11] Data in this paragraph is from BP Statistical Review of World Energy 2009.

Libya is among world's top-10 oil reserve countries

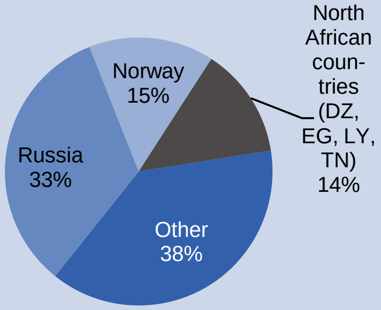
% of total world oil reserves



Source: BP Statistical Review of World Energy 2009 36

North Africa accounts for 12% of EU's oil imports ...

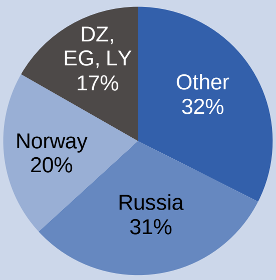
Share of EU-27 oil imports in %



Source: Eurostat 37

... and 17% of its gas imports

Share of EU-27 gas imports in %



Source: Eurostat 38

Deutsche Bank is a founding member of the Desertec consortium, whose goal is to cover a substantial part of MENA electricity demand and/or 15% of the European demand in 2050 with electricity from wind energy, photovoltaic and solar power in North Africa and the Middle East. The Desertec consortium consists of 13 founding members who plan to focus first on the establishment of a suitable regulatory and legislative environment for the implementation of the project and then to propose and implement solar/wind projects, as well as high voltage direct current transmission lines.

Source: DB Research

In terms of industry structure, in both resource-rich countries, Algeria and Libya, the state plays a strong role. In Algeria, the hydrocarbon sector is dominated by state-owned Sonatrach, which commands 60% of the oil production market and 90% of gas production. According to the hydrocarbons law passed in 2006 Sonatrach has at least a 51% stake in all exploration and refining joint ventures with foreign companies, and will participate in all energy sector projects. In Libya, the oil sector is dominated by the state-owned National Oil Corporation (NOC). According to the US energy information administration (EIA) the participation of international oil companies in Libya's oil concessions is expected to be cut to 20% from 49%. These high government stakes in energy projects and the potential revision of contracts (e.g. Eni, Occidental Petroleum Corporation, Repsol and Total had to accept a lower share of revenues from oil and gas production in Libya in 2008/2009) are potential deterrents to foreign investment in the North African energy sector. Nevertheless, the EIA projects increasing gas production in Egypt and Libya and increasing gas and oil production in Algeria on a twenty-year horizon (i.e. up to at least 2030).[12] From the investor's point of view, this makes the countries an attractive destination.

North Africa is an important source of energy for the EU

Libya, Algeria and Egypt are important sources of oil and gas for the EU-27. They are responsible for 12% of total EU-27 oil imports (see chart 37) and 17% of natural gas imports (see chart 38). Five pipelines can transport gas to Europe, four of which have their origin in Algeria. Two of them go to Spain, one of them directly, one via Morocco, while the other two go to Italy (one is under construction). The fifth pipeline connects Libya to Italy. As the EU aims to diversify its energy supply and to reduce its dependence on Russia, the North African countries have a good opportunity to expand their supply to Europe over the next few years.

North Africa a good destination for renewable energy investment

As climate change is high on the political agenda North Africa is increasingly moving into the spotlight as a source of renewable energies (see box on the left). Renewable energies have become an important industrial sector in Europe and the North African region provides excellent natural conditions for investment. According to Germany Trade and Invest, the average annual solar irradiation per square metre is between 2,000 kWh and 2,700 kWh in North Africa

[12] International Energy Outlook 2009, EIA.

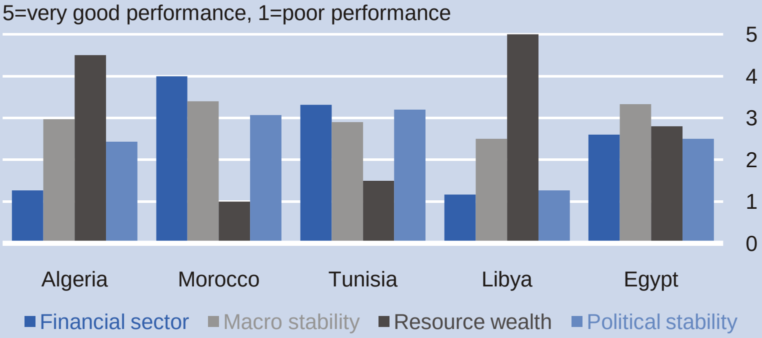
whereas it is around 1,050 kWh in Germany. With regard to the regulatory framework, Tunisia, Algeria and Morocco have already passed laws to foster the use of renewable energies in their countries. According to the World Bank, Egypt plans to generate 20% of energy from renewable sources by 2020. Due to strong and persistent winds in the Gulf of Suez, Egypt is also deemed an excellent location for the generation of electricity by windpower. As energy consumption in North Africa is increasing steadily (at a projected rate of 6-9% p.a. in Algeria and Morocco) the countries also have an incentive to invest in renewable energies in order to cover their own demand. One option is to invest in hybrid power plants, which require solar energy and gas for production.

Conclusion

We summarise the findings of the previous chapters by ranking the five countries by attractiveness to potential investors. In a first step we look at the countries' performance in the four categories presented in our study relating to the economic potential of a country, i.e. macroeconomic stability and diversification, financial sector strength, resource wealth, and political stability and business environment. The macroeconomic stability and diversification score is based on the health of external finances, debt levels and degree of economic diversification. The financial sector strength score reflects the depth of the banking sector, prudential indicators, degree of state ownership and size of local capital markets. The resource wealth score captures the size of oil and gas reserves and production. The political stability and business environment score is based on political risk, corruption and governance indicators. The results are presented in chart 39.

The four sub-components of our economic potential index

5=very good performance, 1=poor performance



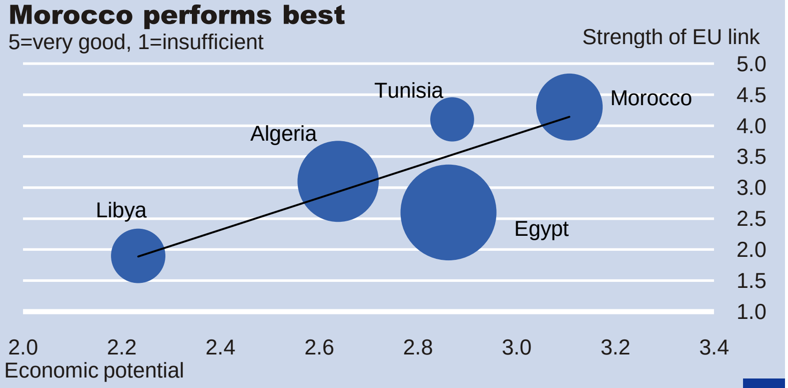
Source: DB Research 39

In a second step, we simply aggregate the four scores with an equal weighting, and add the criterion of EU links (see chart 40). As a third criterion the size of the "bubble" in the chart reflects the size of the economy.

Morocco stands out as the most promising economy in North Africa due to its sizeable economic potential and strong EU link. Tunisia and Egypt rank second with Egypt having the bigger domestic market, but Tunisia being more closely linked to the EU. Libya and Algeria underperform despite their resource wealth due to their underdeveloped financial systems.

Morocco performs best

5=very good, 1=insufficient



Note: Size of bubble reflects GDP in USD bn.

Source: DB Research **40**

Marion Mühlberger (+49 69 910-31815, marion.muehlberger@db.com)
Marco Semmelmann (+49 69 910-31711, marco.semmelmann@db.com)

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