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Convergence and Integration of Banking Sector Regulations in the Euro-Mediterranean area

Trends and Challenges

Rym Ayadi, Emrah Arbak and Willem Pieter De Groen

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Abstract

This analysis of regulatory convergence shows that substantial improvements have been made in the southern and eastern Mediterranean countries (SEMCs), yet they still suffer from key weaknesses in deposit insurance, entry obstacles, political interference and the strength of legal rights. In particular, deposit insurance systems in many SEMCs are not explicit, which could lead to uncertainties in the provision of support to banks in case of default. Moreover, most systems do not attempt to align the banks' incentives in risk-taking with those of taxpayers by implementing risk-based premiums. Another persistent issue is the presence of entry obstacles, with signs of substantial barriers to entry and continued government ownership of banks. The comparison of regulatory systems also highlights that some SEMCs have barely been able to catch up with the strong increase in supervisory independence in EU Mediterranean countries in recent years. While creditor protection remains relatively weak, significant improvements in credit information have occurred since 2003, notably through the establishment of private credit bureaus with universal coverage.

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Rym Ayadi, Emrah Arbak and Willem Pieter de Groen[*]

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1. Introduction

Southern and eastern Mediterranean countries (SEMCs) have undertaken substantial reforms in their financial sectors in recent years. This technical report develops a number of indicators to track the evolution and assess the adequacy of banking regulations using publicly available and comparable surveys for a large sample of countries since the early 2000s. To allow comparability across the Mediterranean, the report develops the measures for ten SEMCs (Algeria, Egypt, Israel, Jordan, Lebanon, Morocco, Palestine, Syria, Tunisia and Turkey) and seven EU Mediterranean countries (Cyprus, France, Greece, Italy, Malta, Portugal and Spain). Libya is the only country covered by the MEDPRO project that is not addressed in this report, because no comparable data are available.

The aim is to develop quantitative measures of regulatory development to assess regulatory convergence on international norms. In line with Ayadi et al. (2011), seven distinct regulatory areas are identified for assessing the various dimensions of regulatory adequacy. These cover the definition of banking, licensing requirements, capital requirements, the independence and power of the supervisor, the presence of safety nets, disclosure and the availability of credit information using distinct data sources. Although these provide a broad view of the extent of regulation, several potential areas (i.e. payment and settlement systems, credit guarantee schemes and financial inclusion) have been excluded due to the unavailability of comparable information sources for the sampled countries.

The analysis shows some levels of convergence in banking regulations in the region. The SEMCs have improved credit information and capital requirements as well as reduced entry obstacles in recent years. Nevertheless, they still suffer from key weaknesses in deposit insurance, entry obstacles, political interference and the strength of legal rights.

The remainder of this report is structured as follows. The second section provides a description of the methods and data used to analyse the convergence of banks in the Euro-Mediterranean area. In the third section, the quantitative measures are presented and discussed. Based on the results, conclusions and policy recommendations are drawn in the fourth section.

2. Methodology

The main source of information for the regulatory adequacy indices are the Bank Regulation and Supervision Surveys (henceforth the 'BRSS') developed by Barth et al. (2001), later revised in 2003, 2007 and 2011.[1] All four surveys are built on official responses to questionnaires that were sent to the national regulatory and supervisory agencies of over 120 countries, most of which were returned.[2] The

[*] Rym Ayadi is Senior Research Fellow at the Centre for European Policy Studies (CEPS) in Brussels and Coordinator of the MEDPRO project, Emrah Arbak was a Researcher at CEPS and Willem Pieter De Groen is a Researcher at CEPS.

[1] For the discussion of the results and other aspects of the data, see Barth et al. (2006, 2008 and 2012).

[2] The number of countries responding to the survey varied over time. The original survey of Barth et al. (2001) had 117 country respondents, including a wide diversity of developed, developing and underdeveloped countries.

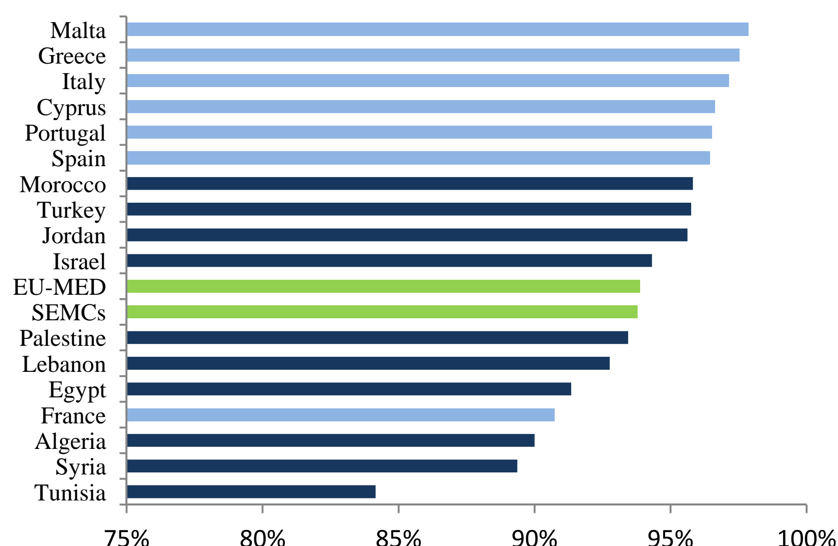
questions cover a wide variety of areas, including banking activity, entry, capital regulations, supervisory authority, private monitoring, deposit insurance and external governance.

One of the key advantages of the BRSS is that the questionnaires have remained relatively similar over the years, although the later versions cover more areas than the original survey. This particular feature of the datasets allows us to make comparisons by building composite indices based on specific answers over time to track the evolution of the different regulatory and supervisory elements.

A key disadvantage of the Barth et al. (2001) survey is that the number of questions responded to in the 2003, 2007 and 2011 revisions vary from one country to another. For the Mediterranean countries, the aggregate response rates are generally lower than for the entire sample. As noted in Figure 1, among the SEMCs, the Moroccan regulatory authorities were the most responsive to the survey, with an average response rate above 95%. In contrast, three SEMCs – Algeria, Syria and Tunisia – had response rates of between 83% and 90%, which is well below the average rate for the Mediterranean countries.

Although the response rates appear high in general, the existence of a single partial or empty answer renders the construction of a relevant composite index dubious, since there is no clear way of scoring for missing responses. Moreover, some countries, such as Algeria, Palestine, Syria, Tunisia and Turkey, have not responded to all four surveys. Palestine (the 2011 survey) only responded to a single survey, Algeria (2003, 2007), Syria (2007, 2011) and Tunisia (2003, 2011) to two surveys and Turkey (2000, 2003, and 2011) to three surveys. To avoid any inconsistencies, empty answers were scored as zero in the construction of the relevant indices. This approach is in line with Barth et al. (2006, 2012). Moreover, the assessment of regulatory convergence is based on the calculation of regional averages, weighted by the total banking assets of each country. These allow us to make a sounder judgment of whether the regulatory conditions on both coasts of the Mediterranean are converging.

Figure 1. Average response rates to the BRSS of Barth et al.



Note: Response rates are averaged over the four surveys and correspond to the number of questions with complete (i.e. excluding empty or partial) answers divided by the total number of questions used to compute the composite indices presented in this report.

Source: BRSS.

The later revisions achieved greater participation, with 152 in 2003, 142 in 2007 and 125 countries participating in 2011.

A second disadvantage of Barth et al. (2001) and its revisions is that the questions did not cover all regulatory and supervisory areas. Two major areas where the surveys lacked depth were the details on deposit insurance guarantee schemes and institutional variables, such as the extent of credit information sharing and creditors' legal rights. To fill the gap, several additional sources were used to supplement the construction of the composite indices, including the deposit insurance database of Demirgüç-Kunt et al. (2005), the IMF and World Bank's Financial Sector Assessment reports, the World Bank's Doing Business Indicators and the websites of the national authorities.

3. Composite indices

Seven composite indices have been created using the various data sources identified above:

I. Scope restrictions
II. Entry obstacles
III. Capital requirement stringency
IV. Supervisory authority
V. Deposit insurance
VI. Private monitoring
VII. Credit information and laws.

These areas provide relatively broad coverage of the quality and evolution of banking regulation and supervision. The composite indices have been calculated for each country and also for the SEMCs and EU-MED countries included in our sample.

The following sections revise and compare the evolution of the regulatory conditions in each of the seven areas noted above.

3.1 Area I: Scope restrictions

As is evident from the differing business models of financial institutions across the world, financial institutions are becoming increasingly complex and offering a wider spectrum of products. Some countries restrict banking to a narrow range of activities, such as taking deposits and issuing credit with little flexibility in debt and asset management, while others provide more flexibility. The regulations typically restrict the extent to which banks may engage in the business of i) securities underwriting, brokering, dealing and all aspects of the mutual fund industry; ii) insurance underwriting and selling; and iii) real estate investment, development and management.

The composite indicator used in this area to assess the extent of restrictions imposed on banking activity is based on the Banking Activity Restrictiveness Index in the BRSS.[3] The surveys provide measures of the degrees of restrictiveness for each of the above four categories, ranging from unrestricted (1 point), mostly permitted (2 points) and too restricted (3 points) to fully prohibited (4 points). The Banking Activity Restrictiveness Index sums up the scores for each category to come up with a measure of the extent to which restrictions are present for banks, with a maximum restrictiveness score of 12 points, where no activity other than narrow banking is allowed.

The country-specific results summarised in Figure 2 and Table 1 show that the regulators in the SEMCs impose more restrictions than the EU-MED countries in general. A deeper analysis of the survey results (not included here) shows that on both coasts of the Mediterranean, regulators impose some form of restriction on insurance activities. Israel and Jordan's banks face high restrictions among the sampled countries, where all real estate activities and some securities and insurance activities are prohibited. This is largely in line with Turkey's banks, although the latter have only to deal with a few restrictions in order to engage in securities activities, and Syria's banks, which are prohibited from

[3] The Banking Activity Restrictiveness Index is constructed by summing up the scores for the World Bank Guide (WBG) questions 4.1-4.3, as detailed in Appendix 2 of Barth et al. (2006).

engaging in both insurance and real estate activities, but on the other hand have complete freedom to engage in securities activities. Morocco's banks are similarly restricted in their activities, but are to a limited extent allowed to engage in insurance activities. Algerian banks are prohibited from engaging in insurance activities, but have complete freedom in engaging in securities and real estate activities. In contrast, Palestine's banks have complete freedom to engage in insurance activities and face fewer restrictions in both securities and real estate investment activities. Lebanon's banks are prohibited from engaging in real estate activities yet have a large degree of freedom to engage in insurance and securities activities. Egypt imposes some restrictions on insurance and real estate, largely comparable with the EU-MED countries. It is not possible to judge the changing conditions in Tunisia owing to the incompleteness of information. Turning to the EU-MED countries, the banks in general face fewer restrictions than most of their neighbours. All EU-MED banks have complete freedom in engaging in securities activities. Moreover, Spanish, Portuguese and Greek banks are also less restricted from engaging in insurance and real estate activities. Still, Cypriot and Maltese banks are prohibited from engaging in real estate activities and French banks in insurance activities.

Figure 2. Banking activity restrictiveness, by region (% of maximum score)

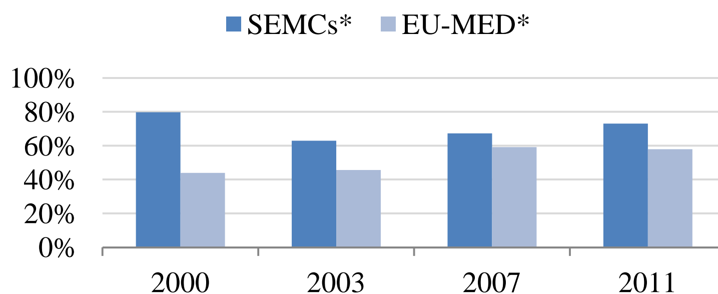


Table 1. Banking activity restrictiveness, by country and region (% of maximum score)

	2000	2003	2007	2011
Algeria	..	42	50	..
Egypt	83	58	58	67
Israel	83	83	75	83
Jordan	67	50	67	83
Lebanon	75	67	75	58
Morocco	83	58	75	67
Palestine	..	..	..	42
Syria	..	..	67	75
Tunisia	..	67	..	50
Turkey	75	50	..	75
SEMCs*	80	63	67	73
Cyprus	42	67	67	58
France	33	33	58	67
Greece	58	67	50	50
Italy	58	67	75	58
Malta	58	67	67	67
Portugal	50	58	75	42
Spain	50	42	42	42
EU-MED*	44	46	59	58
AVG	47	47	59	59
STDEV	14	15	12	11

* Regional averages are weighted by total banking assets.

Note: Higher values represent more restrictive rules, with a maximum score of 12 points.

Source: BRSS.

The figures show that there is a convergence tendency when the regional weighted averages are considered. Indeed, while the EU-MED weighted averages have moved up gradually over time, the SEMCs averages have gone down, converging on the former. However, there are clear differences within each sub-region. For example, Israel and Jordan impose substantial restrictions while Palestine has the most flexible system. As for the EU-MED countries, Spain's system imposes the least amount of restrictions while France and Malta have increasingly narrowed the scope of banking activities over the years. This EU-MED trend may change as a result of the new banking reforms that are moving towards more restrictions on banking activities as a result of the financial crisis.[4]

3.2 Area II: Entry obstacles

The competitive conditions in a country depend crucially on the regulatory structures and conditions that might hinder or prevent entry into the banking sector by domestic or foreign banks. In some countries, the obstacles may take the form of excessive licensing or entry requirements, which are applicable to domestic and foreign banks alike. In others, the governments may restrict foreign entry as part of a conscientious policy choice, either explicitly by setting limits on ownership or more importantly by rejecting foreign applications in a disproportionate manner.[5] Lastly, a banking sector that is predominantly state-owned may be disadvantageous for the development of privately owned banks.[6]

Three indicators are utilised to construct the composite index assessing the impact of entry obstacles.

The first indicator that comes to mind for measuring how much the regulatory structure obstructs entry is legal licensing requirements, which may hamper entry by making the procedures unnecessarily cumbersome. The relevant measure is based on the set of requirements for the licensing application to be considered valid. The index is built on the total number of required documents, including i) draft by-laws, ii) an organisational chart, iii) financial projections, iv) financial information on potential shareholders, v) the background of directors, vi) the background of management, vii) details of funding sources and viii) market differentiation intended.[7]

Figure 3 and Table 2 show that most SEMCs impose levels of stringency in terms of entry requirements that are similar to those of EU-MED countries. In particular, all of the eight requirements named above are commonplace in all ten SEMCs for which the latest survey was completed. As for the EU-MED countries, almost all of them require all eight documents. Only Greece and Portugal do not legally require banks to provide information on the background of future managers.

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[4] In 2012, Commissioner Michel Barnier nominated a group of experts chaired by Erkki Liikanen to examine the need for reforms in the structure of the EU's banking sector. In the final report published in October 2012, the experts advised the European Commission among other things to curb investment banking activities.

[5] Denials of domestic banks are not considered here as they are more likely to arise from prudential concerns, including funding deficiencies or other financial problems, which are commonplace for home-grown banks in countries with less developed financial systems that have limited access to external capital.

[6] Aside from their potentially negative impact on entry, state-owned banks may fulfil an important developmental role in under-developed regions. Recent evidence shows that in the Middle East and North Africa (MENA) region, public banks compensate for the low private bank involvement in the small and medium-sized enterprise (SME) sector, engaging in more risky loan issuance, although they seem to have less than sufficient capacity to manage such risks (Rocha et al., 2010). See also Andrianova et al. (2010) for recent evidence that government ownership of banks is associated with higher long-run growth rates in developing countries.

[7] The entry in the banking requirements index is constructed by summing up the scores for the WBG questions 1.8.1-1.8.8, as detailed in Appendix 2 of Barth et al. (2006).

Figure 3. Requirements for entry into the banking sector, by region (% of maximum score)

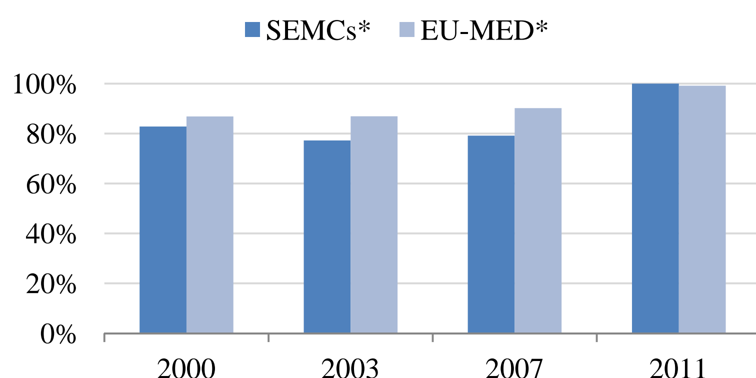


Table 2. Requirements for entry into the banking sector, by country and region (% of maximum score)

	2000	2003	2007	2011
Algeria	..	88	100	..
Egypt	75	100	100	100
Israel	75	38	38	100
Jordan	100	88	100	100
Lebanon	100	100	100	100
Morocco	100	100	100	100
Palestine	..	..	..	100
Syria	..	..	100	100
Tunisia	..	100	..	100
Turkey	88	88	..	100
SEMCs*	83	77	79	100
Cyprus	100	75	38	100
France	75	75	88	100
Greece	100	88	88	88
Italy	100	100	100	100
Malta	100	100	100	100
Portugal	88	88	88	88
Spain	100	100	88	100
EU-MED*	87	87	90	99
AVG	87	86	90	99
STDEV	12	14	9	3

* Regional averages are weighted by total banking assets.

Note: Higher values represent more restrictive rules as a share of a maximum of 8 points.

Source: BRSS.

These results show that most countries in the Mediterranean require similar documents for licensing. This means that these figures probably give at best an incomplete picture of the obstacles faced by potential entrants. More realistically, these requirements are most likely used on both sides of the Mediterranean to screen potential entrants, ensuring that they are 'fit and proper' to run a banking business.

As noted above, the set of licensing requirements do not paint a complete picture of entry obstacles. The second index considers the more discretionary power that the authorities enjoy by granting or rejecting entry. More specifically, the index is based on the fraction of licensing applications for foreign banks that have been denied within the past five years from the day the survey was conducted.[8]

Figure 4 and Table 3 clearly show that denials of foreign banking applications are more commonplace in the SEMCs, which is in stark contrast to the EU-MED countries, where such denials are very rare. In particular, all of the licensing applications for foreign banks for the years between 1995 and 2002 were denied in Egypt. More recently, Egypt denied nearly a third of the foreign licensing applications (four out of five) in the five years leading to 2011. Jordan denied two of the four applications over the same period. Turkey also refused two of the fifteen foreign applications. Israel and Morocco denied several foreign banking applications in the past, but none of the five applications was denied in the last observation period of 2006 to 2010. Algeria, Lebanon, Palestine, Syria and Tunisia do not appear to use foreign denials as an entry obstacle. Overall, the percentage of foreign denials in the SEMCs has decreased gradually since 1995. These results show signs of convergence between the SEMCs and EU-MED countries.

Figure 4. Share of foreign applications denied, by region (%)

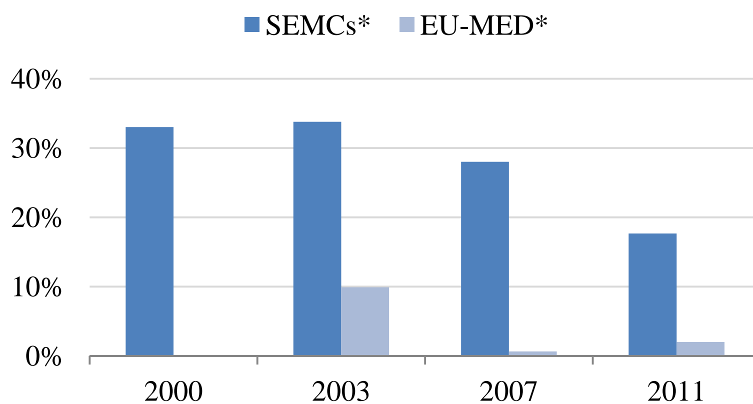


Table 3. Share of foreign applications denied, by country and region (%)

	2000	**2003**	**2007**	**2011**
Algeria	..	0	..	..
Egypt	100	100	32	80
Israel	0	17	20	0
Jordan	..	80	90	50
Lebanon	0	0	0	0
Morocco	..	0	50	0
Palestine	..	..	..	0
Syria	..	..	0	0
Tunisia	..	0	..	0
Turkey	..	42	..	13
SEMCs*	33	34	28	18

[8] The share of foreign denials are addressed by WBG question 1.10, as detailed in Appendix 1 and 2 of Barth et al. (2006).

Table 3. Share of foreign applications denied, by country and region (%) (continued)

Cyprus	0	0	0	20
France	0	..	0	0
Greece	0	14	0	0
Italy	0	13	3	9
Malta	0	0	0	0
Portugal	0	0	0	0
Spain	0	7	0	0
EU-MED*	0	10	1	2
AVG	2	13	2	3
STDEV	13	15	6	10

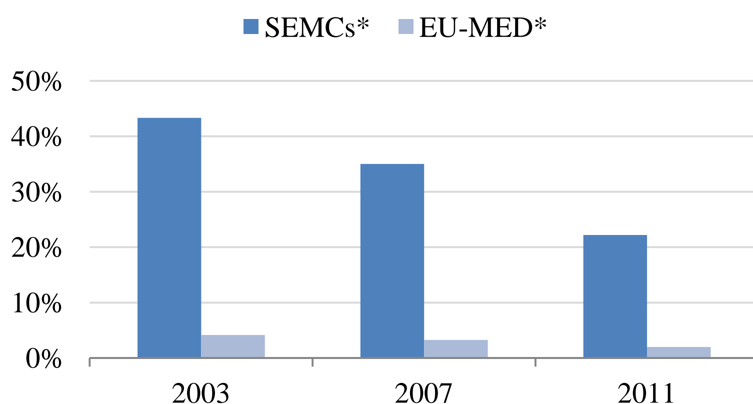
* Regional averages are weighted by total banking assets.

Source: BRSS.

The third and last indicator on entry obstacles relates to the dominance of government-controlled banking. The index is a simple measure of the market power of banks that are majority-owned by the state, i.e. the percentage of total banking assets controlled by the government-owned banks (e.g. the government possesses more than 50% of the bank's equity).[9] The relevant data are available for the 2003, 2007 and 2011 surveys.

Figure 5 and Table 4 point at significant differences on the two sides of the Mediterranean. While the state has little control over banking in the EU-MED countries, except for Greece and Portugal, public banks represent a significant part of the banking activity in the SEMCs. This is particularly the case for Algeria, Egypt and Syria, where the state has control over a significant majority of the banking sector. State-owned banks in these countries often enjoy implicit or explicit state guarantees, with access to public funding, and are possibly subject to less strict or to flexible rules, which may represent a disadvantage for potential entrants and more generally undermine healthy competition (Barth et al., 2004).

Figure 5. Market share of government-controlled banks, by region (% of total assets)



[9] The share of government-controlled banks is addressed by WBG question 3.8.1, as detailed in Appendix 1 of Barth et al. (2006).

Table 4. Market share of government-controlled banks, by country and region (% of total assets)

	2003	2007	2011
Algeria	96	90	..
Egypt	65	67	..
Israel	46	0	0
Jordan	0	0	..
Lebanon	2	..	..
Morocco	35	29	..
Palestine	..	..	0
Syria	..	..	71
Tunisia	43	..	..
Turkey	32	..	32
SEMCs*	43	35	22
Cyprus	4	3	1
France	0	0	2
Greece	23	..	11
Italy	10	9	0
Malta	0	0	0
Portugal	23	25	23
Spain	0	0	0
EU-MED*	4	3	2
AVG	7	4	3
STDEV	13	10	8

* Regional averages are weighted by the total banking assets.

Notes: Figures represent share of banks with at least 50% state ownership.

Source: BRSS.

Put together, the three indices provide a contrasting picture of the sampled countries in terms of entry obstacles. The set of documents needed for a valid licensing application are largely similar on both sides of the Mediterranean. These requirements are most likely used to ensure that only 'fit and proper' undertakings are allowed to operate as banks. Only two countries, Greece and Portugal, can be distinguished in this respect, with few licensing requirements. Turning to less official controls that the authorities exert on the banking sector, foreign entry denials are proportionally high in some of the SEMCs, particularly in Egypt and Jordan. The state also maintains substantial direct control over the banking sector in most of the countries in the region, with publicly owned banks accounting for more than two-thirds of the banking sector activities in Algeria, Egypt and Syria. In short, although the official entry conditions appear comparable, there are significant and persistent entry obstacles that can curtail competition in the SEMCs' banking sectors, possibly emanating from official authority in practice and political interference.

3.3 Area III: Capital requirement stringency

One of the common aims of regulating banks is to ensure that they operate soundly. Regulatory capital requirements are an important part of these rules, which determine the minimum amount of capital a bank should hold relative to its total assets (or risk-weighted assets).

Comparing the capital ratios represents a good first step towards understanding how sound the banking sector is. The capital ratios in the SEMCs are clearly higher than in the EU-MED, as depicted in Figure 6 and Table 5. For a start, with the exception of Greece, all the countries have maintained a total capital ratio of between 9% and 15%. Since 1998, the banks in the SEMCs have become better capitalised, with the average capital ratios reaching 16.9% towards the end of the period. In 2011, the

capital ratios slightly decreased to 15.5%; especially the capital ratios of fast-growing banking sectors, like that of Turkey, declined.

Figure 6. Regulatory capital ratios, by region (% of risk weighted assets)

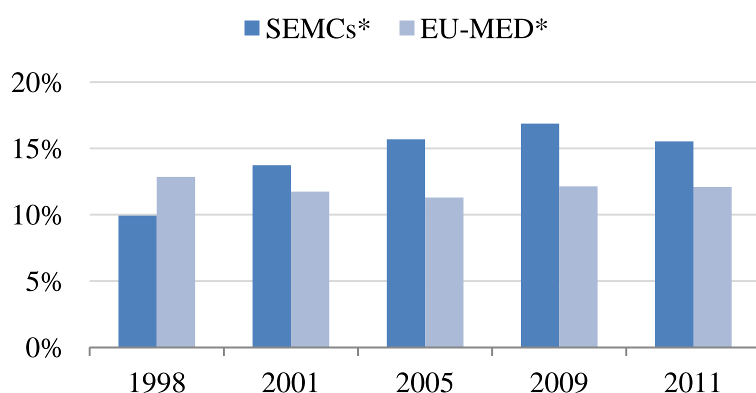


Table 5. Regulatory capital ratios, by country and region (% of risk weighted assets)

	1998	2001	2005	2009	2011
Algeria	..	11.9	12.0	22.1	20.9
Egypt	10.2	9.8	14.1	15.1	15.6
Israel	9.2	9.5	10.7	12.6	14.0
Jordan	..	17.5	17.6	19.6	18.2
Lebanon	..	18.0	22.9	13.7	13.3
Morocco	13.1	12.6	11.5	11.8	11.7
Palestine	..	..	..	21.9	21.6
Syria	..	..	..	21.0	..
Tunisia	..	10.6	12.4	12.2	11.5
Turkey	..	20.8	22.8	20.6	16.6
SEMCs*	9.9	13.7	15.7	16.9	15.5
Cyprus	9.9	14.0	13.0	12.0	8.3
France	..	12.1	11.4	12.4	12.8
Greece	11.4	13.6	13.3	11.7	-1.7
Italy	13.4	10.4	10.6	12.1	12.7
Malta	..	..	..	13.5	13.5
Portugal	12.3	9.5	11.3	10.5	9.8
Spain	12.5	13.0	11.7	11.9	12.4
EU-MED*	12.9	11.7	11.3	12.1	12.1
AVG	12.6	11.9	11.6	12.4	12.4
STDEV	1.1	1.7	1.8	1.8	2.5

* Regional averages are weighted by total banking assets.

Notes: Figures represent the share of total capital in risk-weighted assets using the 1988 Basel Accord definitions.

Sources: BRSS and IMF Global Financial Stability Reports.

The SEMCs' banks appear to be at least as well capitalised as their northern counterparts, especially since the early 2000s. Does this result reflect the stringency of capital requirements or a lower appetite for risk? In other words, is it the regulations that make the banks sounder or are the banks simply not willing to take too many risks? To answer this important question, it is necessary to look deeper into the rules.

There are different ways of measuring the stringency of capital requirements. The index that is used here gives consideration to the types of capital allowed, the risk weights applied and whether the minimum capital ratios vary with risk. More specifically, the capital stringency index aims at determining the extent to which capital requirements restrict leverage potential and risky behaviour, including questions on i) whether the minimum capital-to-asset requirements are in line with 1988 Basel Accord definitions; ii) whether the minimum ratio varies with the bank's credit risk or iii) market risk; and whether the value of iv) unrealised loan losses, v) unrealised security losses or vi) foreign exchange losses are deducted from regulatory capital. Additionally, the index seeks to measure the restrictions imposed on the source of regulatory capital, such as vii) whether these funds are verified by regulatory authorities; and, whether viii) cash and government securities, or more generally ix) non-borrowed funds are the only allowed forms of capital for initial disbursements and subsequent injections.[10] A greater number of affirmative responses to these questions lead to a higher stringency score.

Figure 7 and Table 6 summarise the comparison of the stringency of capital requirements for the countries in our sample. A quick glance through the figures reveals that the capital requirements have become more stringent in most of the countries in the sample. More and more SEMCs are implementing legislation to align their capital requirements with the Basel II capital standards. Jordan, Lebanon, Morocco, Syria, and Turkey, for instance, adopted legislation that allowed banks to vary their minimum capital requirements depending on banks' individual credit risk and market risk. The implementation of this legislation led to a jump in capital stringency between 2007 and 2011. Among the SEMCs, Tunisia is the only exception, with clearly less stringent capital requirements. The Tunisian authorities notably filled out fewer questions regarding capital stringency than seven years earlier.

Among the EU-MED countries, Cyprus has the most stringent capital requirements, with affirmative answers to six out of seven questions in 2011, followed by France and Spain. Like all other EU-MED countries, the Cypriot regulatory/supervisory authorities do not verify the sources of funds to be used as capital. For France and Spain, there was a clear tendency of a substantial strengthening of the rules. However, during the financial crisis, the capital requirements in these countries were relaxed a bit. Both countries allowed banks to increase capital with assets other than cash or government securities. The initial capital of banks in Greece, Italy and Malta can also include borrowed funds. Banks in Portugal are not obliged to deduct unrealised losses in securities portfolios from capital, but may fund capital contributions using assets other than government securities or cash.

With these results in hand, it is easy to see that there is a pattern of convergence. EU members Greece, Italy, Malta and Portugal have rather flexible capital requirements, while the opposite is true for Cyprus, France and Spain. In contrast, the capital requirements of most of the SEMCs are in general more stringent than the EU-MED averages, especially regarding rules concerning the usage of non-cash or government securities and borrowed funds for capital.[11]

[10] The stringency of the capital requirements index is addressed by WBG questions 3.1.1, 3.2, 3.3, 3.9.1, 3.9.2, 3.9.3, and 1.5–1.7. The calculation of the index is detailed in Appendix 2 of Barth et al. (2006), pp. 337-338. One question (WBG 3.7) on the fraction of revaluation gains allowed as part of capital has been omitted from the calculation of the index because the responses were not available for most of the countries in our sample.

[11] These results are largely in line with the key regulatory shortcomings identified for the region in Tahari et al. (2007), using compliance of European countries with Basel Core Principles (BCPs) on prudential regulations and requirements (BCPs 6 to 15) as a benchmark.

Figure 7. Stringency of capital requirements, by region (% of maximum score)

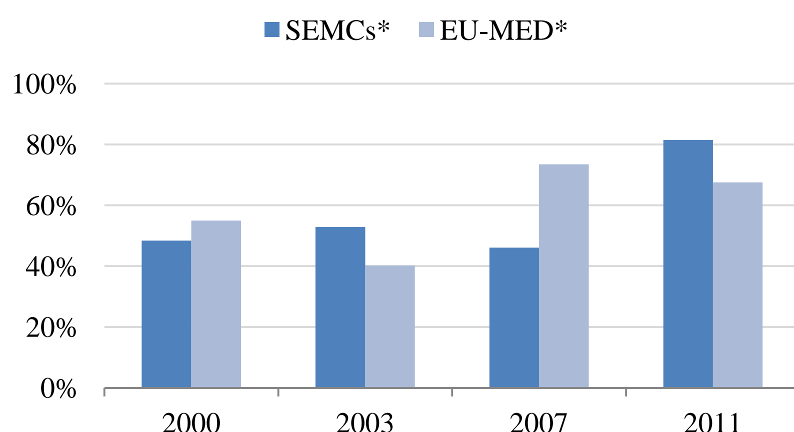


Table 6. Stringency of capital requirements, by country and region (% of maximum score)

	2000	2003	2007	2011
Algeria	..	44	78	..
Egypt	56	33	33	71
Israel	33	56	44	86
Jordan	67	67	56	86
Lebanon	56	67	56	71
Morocco	56	56	33	86
Palestine	..	..	..	86
Syria	..	..	33	71
Tunisia	..	67	..	57
Turkey	56	56	..	86
SEMCs*	48	53	46	81
Cyprus	11	44	67	86
France	56	22	89	71
Greece	33	56	33	57
Italy	44	33	33	57
Malta	67	56	56	57
Portugal	44	67	78	57
Spain	78	89	89	71
EU-MED*	55	40	73	68
AVG	54	41	72	69
STDEV	12	25	25	8

* Regional averages are weighted by total banking assets.

Note: Higher values represent more restrictive rules as a share of a maximum score of 9 points in 2000, 2003 and 2007 and 7 points in 2011.

Source: BRSS.

3.4 Area IV: Supervisory authority

A key issue in the effectiveness of banking regulations is whether the supervisory authorities have the necessary powers to apply a variety of measures to discipline or, at the extreme, resolve banks that violate the rules or engage in imprudent activities. To that extent, in most countries, the supervisors take prompt corrective action against a bank if the capital falls below the minimally required level. If the deterioration of the bank continues, the supervisor must have the ability to find a resolution before

the bank becomes insolvent, posing a systemic threat. To be effective, the supervisors need access to reliable and frequently updated information on the condition of the banks. The judicial systems often allow the courts to intervene, thereby diminishing, postponing or reversing illegitimate supervisory actions; however, these actions should not undermine the supervisor's chief responsibility of protecting and ensuring an orderly operation of the banking market. These aspects of supervisory system issues should be in line with the regulatory priorities and not subject to political patronage. In short, the supervisors should have the authority to discipline potentially troubled banks and resolve problems while remaining independent of political influence.

Two indices are used for measuring supervisory authority.

The first index measures the official power of the supervisor to take specific actions to correct or prevent problems. The relevant questions include the ability of supervisors to i) meet external auditors without the approval of a bank, ii) communicate directly with auditors on illicit activities undertaken by a bank's management or directors, iii) receive disclosure of off-balance sheet items, iv) take legal action against negligent auditors, v) change the organisational structure of troubled banks, vi) order the management or directors to cover losses, and vii) suspend dividend distributions, as well as viii) bonuses and ix) management fees. Additionally, for the 2003, 2007 and 2011 surveys, questions on troubled banks considered the supervisors' ability to x) declare insolvency, xi) suspend ownership rights, xii) supersede shareholder rights and xiii) fire or hire management or xiv) directors.[12] An affirmative answer to any of these questions represents greater supervisory power. Some of these powers may only be exercisable by some supervisory-like institutions, such as the depository insurance agency or the bank restructuring agencies, which grant more moderate power to supervisors.[13] In other cases, the courts or the government may be involved, which would serve to void the power of the supervisors in those actions.

Interestingly, Figure 8 and Table 7 show that the SEMCs and EU-MED countries grant more or less the same power to their supervisory authorities. Yet there are large differences among the individual countries. In Jordan and Palestine, the official supervisor is allowed to intervene directly in all the domains highlighted above. On the other hand, the official supervisor in Syria has mostly elementary tools. It has, for instance, the possibility to meet external auditors without the approval of the bank. But it is not allowed to communicate directly with auditors on illicit activities or take any legal action against these auditors. The official supervisor can further prevent dividends being paid out, but it cannot suspend bonuses for the management. Moreover, as in all the SEMCs excluding Jordan and Palestine, the Syrian official supervisor does not have the authority to declare a bank insolvent or supersede shareholder rights.

Turning to the EU-MED countries, it is interesting to see that the new member state, Cyprus, grants increasing official power to their authorities. The same applies to France and Italy and, to a lesser extent, Portugal and Spain. Greece once again obtains the lowest score in official supervisory power: unlike other countries in our sample, the Greek supervisory authority has no right to meet the external auditor without prior approval of the bank or sue the auditors for negligence. The banks are also not obliged to publish information on off-balance sheet positions. Furthermore, the supervisor does not have any power to suspend shareholder rights or replace management.

[12] The official supervisory power index is addressed by WBG questions 5.5-5.7, 6.1, 10.4, 11.2, 11.3.1-11.3.3, 11.6, 11.7, and 11.9.1-11.9.3. The calculation of the index is detailed in Appendix 2 of Barth et al. (2006), pp. 339-342.

[13] In these cases, the aggregate score is augmented by only half points; for more details, see the calculation of the index in Appendix 2 of Barth et al. (2006), pp. 339-342.

Figure 8. Official supervisory power, by region (% of maximum score)

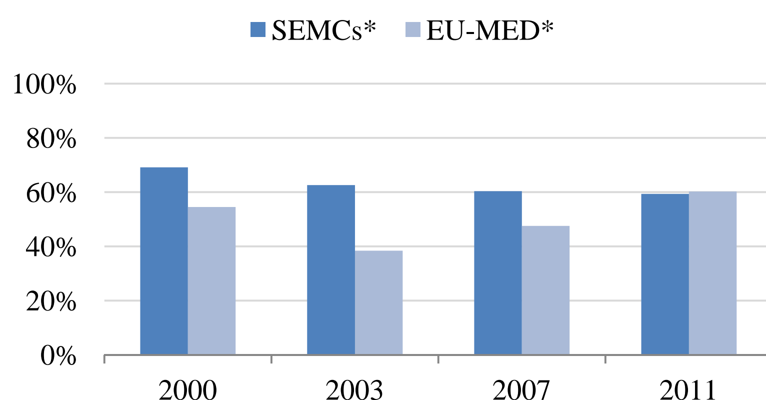


Table 7. Official supervisory power, by country and region (% of maximum score)

	2000	2003	2007	2011
Algeria	..	76	58	..
Egypt	100	74	74	64
Israel	44	37	53	50
Jordan	67	74	47	79
Lebanon	100	53	53	50
Morocco	78	66	68	43
Palestine	..	..	..	79
Syria	..	..	68	36
Tunisia	..	68	..	57
Turkey	67	82	..	68
SEMCs*	69	63	60	59
Cyprus	100	42	63	64
France	67	37	45	57
Greece	56	63	53	39
Italy	33	26	37	71
Malta	67	74	74	71
Portugal	67	74	74	71
Spain	44	47	61	57
EU-MED*	54	38	48	60
AVG	56	40	48	60
STDEV	16	13	10	8

* Regional averages are weighted by total banking assets.

Note: Higher values represent more restrictive rules as a share of a maximum score of 9 points in 2000, 19 points in 2003 and 2007, and 14 points in 2011.

Source: BRSS.

The second index for assessing supervisory authority turns more generally to the independence of the supervisor from political influence. For this index, three questions from the BRSS are considered: i) Are supervisory bodies accountable *only* to a legislative body? ii) Are supervisors legally liable for their actions committed in the exercise of their duties? iii) Does the head of the agency have a fixed

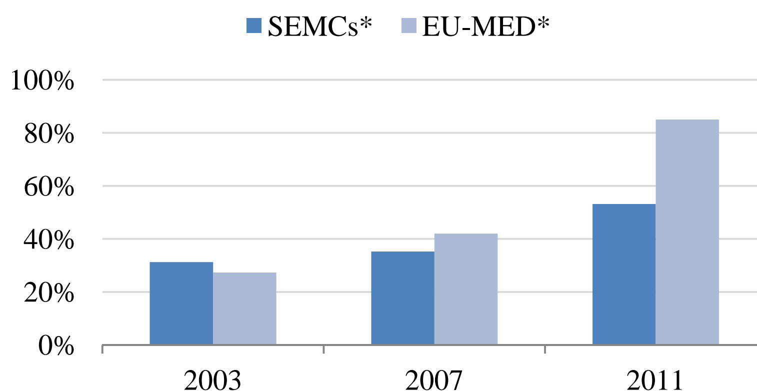
term? The level of independence is determined by points obtained from counting affirmative answers to questions (i) and (iii) and a negative answer to (ii).[14]

The results depicted in Figure 9 and Table 8 show a clear divergence in terms of independence from political interference. While the banking supervisors of the EU-MED countries have become more independent, far less has changed in the SEMCs. The biggest concern remains the accountability of the supervisor directly to the executive arm, i.e. president, prime minister or other cabinet members, which is the case in all of the SEMCs.[15]

Of particular concern is Algeria, where none of the three criteria outlined above was satisfied in the last available survey, which implies an enormous potential for political interference. The same can also be said of other countries, such as Israel, Lebanon, Morocco and Syria. In comparison, the supervisor is only accountable to a legislative body (such as a parliament) in almost all EU member states except Greece and Italy, as well as in Egypt, Jordan, Palestine, Tunisia and Turkey. Once again, the Italian supervisory authority remains well below the EU standards in terms of independence from political interference due to its accountability to the central government and its legal liability for damages to a bank in the exercise of its duties. Another key distinguishing factor is the fixed term for the head of the regulatory authority, which is not available as an option in Algeria, Israel, Morocco or Syria, but has become increasingly popular among the EU members.

The results of the BRSS surveys reviewed in this section show that the powers granted have increased or remained constant in almost all of the countries. Moreover, the official powers granted to supervisors appear to be on the rise on both sides of the Mediterranean. Turning to operational independence, government officials have the ability to politically interfere in the work of the supervisors. Therefore, despite the fact that the supervisors are assigned almost full authority, it is possible that these powers remain notional due to government interference. Provided that some of the SEMCs have a substantial government presence in the banking sector (already noted above), operational independence should be a guiding principle to ensure that all banks – publicly or privately-owned – are treated equally.

Figure 9. Independence from political interference, by region (% of maximum score)



[14] The independence from political interference index is addressed by WBG questions 12.2, 12.10, and 12.2.2. The calculation of the index is slightly different from the specification in Appendix 2 of Barth et al. (2006), pp. 349-350, in that to score a point in question 12.2, the supervisory bodies should be accountable to no one other than a legislative body, such as the parliament or congress.

[15] In the case of Morocco, the governor of the Bank Al-Maghrib serves at the discretion of the king.

Table 8. Independence from political interference, by country and region (% of maximum score)

	2003	2007	2011
Algeria	33	0	..
Egypt	67	67	67
Israel	0	33	33
Jordan	67	33	67
Lebanon	33	33	33
Morocco	33	33	33
Palestine	..	..	67
Syria	..	0	33
Tunisia	67	..	67
Turkey	33	..	67
SEMCs*	31	35	53
Cyprus	67	100	100
France	33	33	100
Greece	67	33	67
Italy	0	33	33
Malta	100	67	67
Portugal	67	67	100
Spain	33	67	100
EU-MED*	27	42	85
AVG	28	42	82
STDEV	19	15	28

* Regional averages are weighted by total banking assets.

Notes: Higher values represent more independence as a share of a maximum score of 3 points.

Source: BRSS.

3.5 Area V: Deposit insurance

Deposit insurance systems are among the key elements of a country's financial safety net, designed to prevent any disruptions to the financial markets and the economy. By protecting depositors, the deposit insurance schemes provide confidence to relatively small depositors and prevent bank runs. At the same time, they may introduce moral hazard, diminishing the depositors' incentives to monitor and screen the banks and amplifying the shareholders' incentives to engage in excessive risk. The moral hazard problem implies that banks have incentives to take on risk that can be shifted to a deposit insurance fund or, ultimately, the taxpayers.

Efforts are being taken across the world to mitigate moral hazard problems arising from deposit guarantee schemes.[16] First, the amount of coverage matters. In some countries, aside from limits on the total amount, co-insurance is imposed to ensure that depositors bear some share of the costs.[17] Second, the use of risk-adjusted premiums may also serve to better internalise the costs of the risks that they take. Third, the way that the deposit insurance schemes are funded also matters. For example, when the government is explicitly or implicitly involved in providing the necessary funds, moral hazard may be attenuated, especially in countries where the government has ample resources. In turn, when the

[16] See Kane (2000) and Demirgüç-Kunt et al. (2005) for a review of the potential effects and key design features of the deposit insurance schemes.

[17] Empirical evidence shows that the coverage limits and co-insurance practices serve to reduce the likelihood of bank failure substantially (Demirgüç-Kunt & Detragiache, 2002).

system is backed with funds provided by banks, moral hazard can be limited by the understanding that the amount of guarantees is restricted by the pooled reserves.

Looking at the existing schemes, there are clear differences on the two coasts of the Mediterranean (Table 9). The revised EU Deposit Insurance Directive requires member states to maintain deposit insurance with a coverage limit of at least €100,000, raised from a minimum of €20,000 in the aftermath of the 2007–09 financial crisis.[18] Most of the countries in the EU-MED have chosen to set this base amount as their coverage limits, representing between four and six times the average figures for annual income per capita. The 2009 amendment also abolished the co-insurance system, which allowed up to 10% of losses to be shared with covered depositors. Risk-based premiums exist in about half of the countries, including France, Greece, Italy and Portugal. Setting itself clearly apart from the other countries in the region, Italy has an *ex-post* funding structure, where the banks are required to contribute after the deposit guarantee scheme is activated. Cyprus, France and Malta have hybrid systems in which substantial amounts of supplementary (*ex-post*) funding may be activated if the funds' resources fall below pre-set levels. The levels of *ex-ante* funds display substantial variation, wherever they exist, with a low of 0.1% of eligible deposits in France and a high of 1.69% in Greece.

Turning to the SEMCs, Egypt, Israel, Palestine, Syria and Tunisia have no schemes in place.[19] In Algeria, Morocco and Turkey, the coverage limits represent one to two times the average annual income, pointing at a much lower level of protection afforded than in the EU. As in the EU-MED, the deposit guarantee schemes do not have a co-insurance option. Turkey is the only country that uses risk-based premiums.

The deposit insurance scheme index identifies the level of observance of standards that are thought to mitigate the moral hazard problem. Since recent information is available, the index is constructed for the years 2003, 2007 and 2011. For countries with an explicit system, three issues are relevant: i) whether a co-insurance discount is applicable to pay-outs, ii) whether premiums are risk-adjusted and iii) whether only banks take a primary role.[20] An additional point is scored for an affirmative answer to each one of these questions. A score of zero is assigned to countries where no explicit system exists, since in those cases the government is assumed to provide implicit guarantees, implying a greater incentive for banks to take risks.[21]

[18] See Directive 2009/14/EC, which amended the Deposit Guarantee Directive 94/19/EC. The minimum amount of €100,000 has been in force since 31 December 2010.

[19] In Egypt, although the legal framework allows for the establishment of an autonomous deposit insurance fund, no scheme has been set up yet.

[20] The calculation of the deposit insurance scheme index follows the format detailed in Barth et al. (2006, p. 354), except that a score of zero is assigned to countries with no explicit insurance scheme.

Three separate sources were used for the information on the deposit insurance scheme. First, the BRSS provided the basic information and evaluation for 2003 and 2007. Whenever the BRSS gave conflicting or incomplete results, the information contained in Demirgüç-Kunt et al. (2005), the European Commission's (2010) assessment of EU deposit guarantee schemes as well as the legal documents from the websites of Bank Al-Maghrib and Banque d'Algérie were used.

[21] Gropp & Vesala (2004) shows that credible implicit guarantees operating through the expectation of public intervention at times of distress can aggravate the moral hazard problem when compared with explicit deposit guarantee schemes. As the authors note, the key issue is whether the institutional and fiscal conditions would make the inherent guarantees credible. It is assumed here that the three countries with no explicit systems, namely Egypt, Israel and Tunisia, have ample fiscal resources and the necessary institutional framework that could make such guarantees credible.

Table 9. Deposit guarantee schemes in the Mediterranean, latest available figures

	Est. date	Coverage limit		Funding (public or banks)	Co-insurance	Risk-based premiums	*Ex post/ ex ante*	Coverage ratio**
		€ (current)	(% of GDP per capita in 2012, PPP)					
SEMCs								
Algeria	1997	6,000	108	Banks	No	No	*Ex ante*	n.a.
Egypt	..	..	..	..	..	..	..	..
Israel	..	..	..	..	..	..	..	..
Jordan	2000	52,500	1,142	Banks	No	No	*Ex ante*	1.87
Lebanon	1967	2,500	19	Banks	No	No	*Ex ante*	n.a.
Morocco	1993	7,000	177	Banks	No	No	*Ex ante*	n.a.
Palestine	..	..	..	..	..	..	..	..
Syria	..	..	..	..	..	..	..	..
Tunisia	..	..	..	..	..	..	..	..
Turkey	1983	21,000	182	Banks	No	Yes	*Ex ante*	6.05
EU-MED								
Cyprus	2000	100,000	479	Banks	No*	No	Hybrid	0.31
France	1999	100,000	363	Banks	No*	Yes	Hybrid	0.10
Greece	1995	100,000	515	Banks	No*	Yes	*Ex ante*	1.69
Italy	1987	103,291	428	Banks	No*	Yes	*Ex post*	0.00
Malta	2003	100,000	494	Banks	No*	No	*Ex ante*	0.40
Portugal	1992	100,000	561	Banks	No*	Yes	*Ex ante*	1.06
Spain	1977	100,000	424	Banks	No*	No	Hybrid	0.65

* Co-insurance has been abandoned by the amending Directive 2009/14/EC.

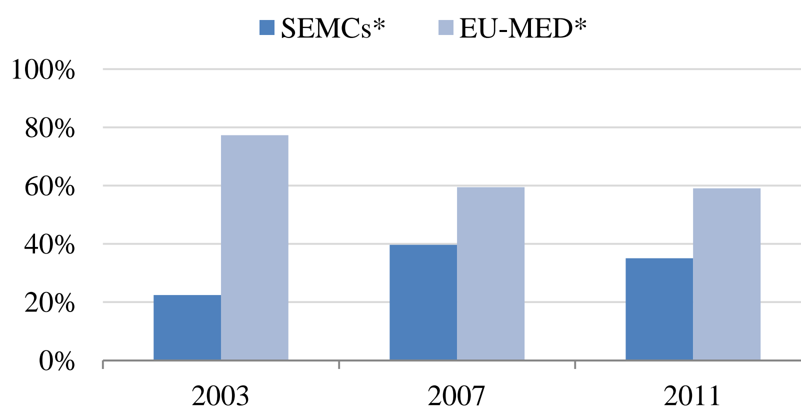
** The actual EU-MED coverage ratio is calculated as the ratio of *ex-ante* funds and eligible deposits using published figures for 2007–08. For Turkey and Jordan, the end of 2011 total reserves of the deposit insurance schemes are divided by the total insured deposits.

Sources: European Commission (2010), IMF (2008), Bank Al-Maghrib and Banque d'Algérie.

The scores in **Error! Not a valid bookmark self-reference.** and Table 10 show that moral hazard issues stemming from implicit guarantees are more of a threat in the SEMCs. For the most part, this is owing to the absence of explicit deposit guarantee schemes in Egypt, Israel, Palestine, Syria and Tunisia. The Algerian system was equivalent to an implicit guarantee in 2003, as the government had a direct funding role.[22] Looking at countries with explicit systems, some similarities emerge. Out of the three issues outlined above, Algeria, Cyprus, Spain, Greece, Jordan, Lebanon, Malta and Morocco only satisfied the requirement that the banks (and not the government) take the primary role of funding the scheme in 2011. The French, Greek, Italian and Portuguese systems, in contrast, include risk-adjusted premiums, significantly impacting the EU-MED averages. Lastly, the EU-MED averages display a downward trend, which is entirely due to the gradual abandonment of the co-insurance payouts. On the other hand, in 2010 the European Commission published a proposal to harmonise the deposit guarantee schemes in the EU, which would oblige the EU member states to implement a risk-based, deposit guarantee scheme that is bank-funded. However, the proposal has not been adopted, since the European Parliament and Council have not agreed on the final terms yet.

Many of the SEMCs do not have an active deposit insurance scheme, albeit some countries, like Israel, Palestine, Syria and Tunisia, are studying or considering implementing one. A badly designed scheme can invite additional risks and may not be better than a system with no scheme at all. The results show that the schemes in Jordan, Lebanon and Morocco (as well as in some EU-MED countries) may indeed amplify the moral hazard risks. Still, these conclusions should be interpreted with care. As the recent financial crisis has shown, when a run on a bank has the potential to spur broader panic, the governments are likely to step in to stop a potential bank run, notwithstanding the types of explicit arrangements in place.[23] One may wonder, quite justifiably, whether the named arrangements really do mitigate moral hazard when they may be so easily replaced with limitless state support. Yet, it should not be forgotten that such blanket guarantees are not viable in most of the SEMCs with limited public resources. Therefore, the explicit schemes, wherever they exist, are the only viable insurance for depositors, highlighting the importance of the design issues in resource-poor countries.

Figure 10. Deposit insurance index, by region (% of maximum score)



[22] Under Law no. 90-10 of 1990 regarding money and credit, the Algerian treasury was a contributor to the deposit guarantee fund (Art. 170). More recently, the government's funding role has been replaced with full funding by banks under the amending Law no. 03-11 of 2003 regarding money and credit (Art. 118).

[23] This was amply demonstrated during the fall of Northern Rock in 2007, when the UK Treasury extended the existing guarantees on bank deposits – with a maximum payout of £31,700 at the time – to cover all deposits.

Table 10. Deposit insurance index, by country and region (% of maximum score)

	2003	2007	2011
Algeria**	67	100	100
Egypt	0	0	0
Israel	0	0	0
Jordan	67	67	33
Lebanon	33	33	0
Morocco	67	67	33
Palestine	0	0	0
Syria	0	0	0
Tunisia	0	0	0
Turkey	33	67	67
SEMCs*	22	40	35
Cyprus	67	33	33
France	100	67	67
Greece	33	33	67
Italy	67	67	67
Malta	67	33	33
Portugal	100	100	67
Spain	33	33	33
EU-MED*	77	59	59
AVG	74	58	57
STDEV	30	18	18

* Regional averages are weighted by total banking assets.

** The Algerian deposit guarantee system, which has existed since 1997, was partly funded by the government in 2003.

Notes: Higher values represent more restrictive rules as a share of a maximum score of 3 points.

Sources: BRSS, Demirgüç-Kunt et al. (2005), European Commission (2010), Federal Deposit Insurance Corporation, Bank Al-Maghrib and Banque d'Algérie.

3.6 Area VI: Private monitoring

Most of the regulatory factors considered in this study relate to the rules and standards set forth by the regulators, which are used to distinguish between acceptable and unsound behaviour. In this manner, the regulatory principles are often well defined, calling for compliance with specific rules or standards. There are other hard-wired forces that also influence banks, however. Market forces and investors may additionally be crucial in shaping decisions and, in particular, restraining risky behaviour. For example, block-holders can, at least in theory, exercise their voting power to influence managerial actions. More realistically, debtors or stockholders use available information to assess the bank's conditions and indirectly influence the management by withdrawing funds, which has an impact on the borrowing costs of the banks. As far as depositors and other debt-holders are concerned, private monitoring could be seriously undermined when an explicit and over-generous scheme for deposit insurance exists.

The availability of reliable and timely information for investors is at the core of market discipline. The index is therefore based on the survey responses to a number of questions on disclosure rules and standards. These concern whether i) a certified audit is required and whether all of the top ten banks are rated by ii) domestic or iii) international credit rating agencies. They also consider whether income standards include accrued but unpaid interest on iv) performing or v) non-performing loans; vi) banks are required to produce consolidated accounts; vii) directors are liable for erroneous or misleading reporting; viii) subordinated debt is allowable or required as part of capital; ix) off-balance items are disclosed to the public; x) banks are required to disclose risk-management procedures and xi)

supervisors are required to make enforcement actions public.[24] The private monitoring score increases with affirmative answers to the previous set of questions.

The comparisons point at a small but growing disparity between the two coasts of the Mediterranean in Figure 11 and Table 11. Although most countries fulfil a majority of the requirements, the continual progress of the European countries is not paralleled in the SEMCs.

Figure 11. Private monitoring, by region (% of maximum score)

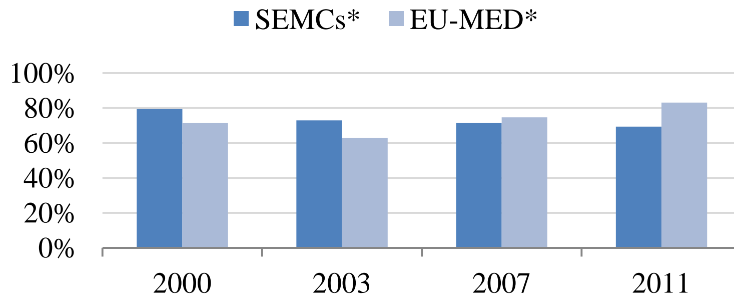


Table 11. Private monitoring, by country and region (% of maximum score)

	2000	2003	2007	2011
Algeria	..	64	55	..
Egypt	78	73	73	73
Israel	89	82	82	73
Jordan	78	64	64	73
Lebanon	100	64	64	36
Morocco	67	73	64	73
Palestine	..	..	..	82
Syria	..	..	82	73
Tunisia	..	55	..	55
Turkey	67	73	..	73
SEMCs*	79	73	71	69
Cyprus	67	73	73	82
France	67	55	73	91
Greece	67	64	82	73
Italy	67	73	73	73
Malta	89	73	73	73
Portugal	89	55	64	55
Spain	89	73	82	82
EU-MED*	71	63	75	83
AVG	72	64	74	82
STDEV	9	9	5	10

* Regional averages are weighted by total banking assets.

Note: Higher values represent more restrictive rules as a share of a maximum score of 9 points in 2000 and 11 points in 2003, 2007 and 2011.

Source: BRSS.

[24] The private monitoring index is addressed by WBG questions 5.1, 5.3, 10.7.1-2, 10.1, 10.1.1, 10.3, 10.6, 3.5-6, 10.4.1, 10.5, and 11.1.1. The calculation of the index is slightly different from the specification in Appendix 2 of Barth et al. (2006, pp. 350-352), excluding a question on the presence of an explicit deposit insurance, which is already covered in another index.

The most striking difference between the SEMCs and EU-MED countries is the share of the top ten banks that are rated by (international or domestic) credit rating agencies, which has widened substantially according to the 2011 survey. In particular, almost all of the top ten banks are rated by credit rating agencies in the EU, except Cyprus and Malta. In the SEMCs, most banks are not rated. In some cases, this is due to the inherent structure of the market. For example, Algeria's largest banks are state-owned and as of 2007 they were not subject to ratings. In other countries, there are clear problems with disclosure. In three of the most developed markets in the region, Israel, Lebanon and Morocco,[25] only half of the top ten banks are rated.[26]

Another common issue, especially more recently, is the exclusion of accrued (though unpaid) interest from income statements, which allows banks undue flexibility in determining their earnings. Lastly, according to the 2011 BRSS, the banks in Tunisia are not required to make public their risk management procedures, despite this requirement having become standard in the region in recent years.

These results show that the regulatory structures of the SEMCs have not matched the progress made in the EU-MED countries in enhancing disclosure rules. Still, it is true that there are broad similarities on both sides of the Mediterranean. For example, a certified audit is compulsory in all of the sample countries and the accounting rules exhibit similarities in most of the countries. Even so, the proportion of banks subject to independent ratings has not changed much in the SEMCs over the past few years.

3.7 Area VII: Credit information and laws

Access to information and laws on creditor protection are crucial for ensuring the smooth operation of credit markets. Economic theory suggests two critical limits to the amount of credit that financial institutions can grant to potential borrowers. On the one hand, credit conditions are clearly bound by the ability of creditors to enforce contracts, require repayment, claim collateral and possibly gain control over the receivables. The easier these actions are, the more likely it is that lenders will grant the loans. On the other hand, lenders would like to have access to accurate information on the potential borrowers, such as credit histories, other lenders and other banking transactions.

Theoretical models suggest that an operational information-sharing infrastructure can reduce adverse selection in credit markets and facilitate access to credit, especially among more opaque borrowers, such as SMEs (Pagano & Jappelli, 1993). When such information is available, the creditors can make a better judgement of the creditworthiness of the borrowers. Other studies have documented the importance of creditors' rights for the availability of credit (La Porta et al., 1998 and Levine, 1998). Recent studies have confirmed these views with increasingly convincing evidence that both credit information mechanisms and creditors' rights have a nontrivial impact on the flow of credit and financial development (Jappelli & Pagano, 2002; Djankov et al., 2007; and Haselmann et al., 2010).

The indices on credit information and laws developed in this section are based on the "Getting Credit" methodology developed in the World Bank's Doing Business surveys.[27] The relevant area covers the legal rights of borrowers and lenders with respect to secured transactions and the extent of credit information sharing. Two sets of indicators are used for these purposes.

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[25] The observation for Morocco is from the 2007 survey, since the Moroccan authorities did not report the equivalent number in the most recent survey.

[26] These results may also arise from a small or highly concentrated banking sector. In such a case, only a handful of top banks will dominate the banking sector while the other (smaller) banks will be subject to less investor scrutiny.

[27] First started in 2003, the World Bank's Doing Business surveys cover over 180 countries, providing a snapshot of regulatory and legal conditions and their effects on businesses, especially on SMEs. Each year, the surveys are sent out to a large number of local experts specialising in different fields, including lawyers, consultants, officials and other professionals who are in close contact with the legal and regulatory structures of the covered countries (the results of the surveys are available at http://www.doingbusiness.org/).

The first set describes how well the collateral and bankruptcy laws facilitate lending, covering i) the ability to use moveable assets while keeping possession of assets and the ability to obtain non-possessory security rights in ii) a single or iii) all moveable asset classes without requiring a specific description of the collateral. It also covers iv) the extension of security rights to future or after-acquired assets; v) the ability to secure all types of debts and obligations through a general description; and vi) the availability of a collateral registry. In addition, it looks at the ability of secured creditors to obtain priority without exceptions in the case of vii) defaults viii) liquidations and ix) restructuring; and x) the possibility of out-of-court agreements on collateral enforcement. An affirmative answer to any one of these questions enhances the relevant scores.[28]

Figure 12 and Table 12 show that fewer legal rights are granted to creditors in the SEMCs. Israel does exceptionally well, better than almost all countries, by satisfying all but one criterion on the availability of out-of-court agreements on collateral enforcement. Among the EU-MED countries, Cyprus does equivalently well, complying with all but one criterion, namely regarding the secured creditors' claims during reorganisation. France and Spain also perform well. Other countries, including those in the SEMCs, do relatively badly, complying only with the criteria on the use of movable assets as collateral, the ability to grant non-possessory rights for a group of assets and the use of debts in collateral agreements.

Figure 12. Strength of legal rights, by region (% of maximum score)

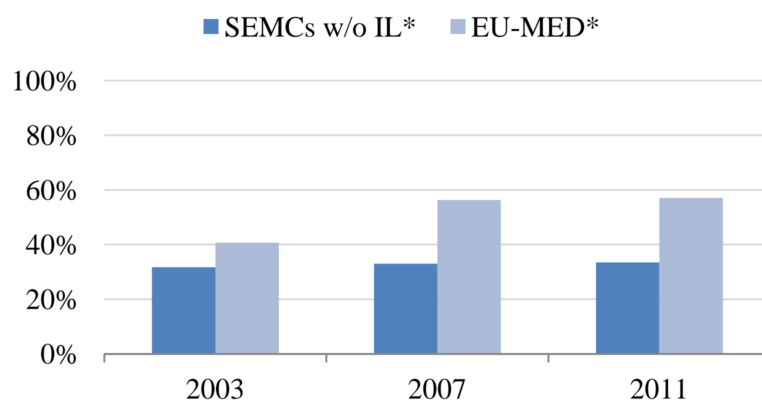


Table 12. Strength of legal rights, by country and region (% of maximum score)

	2003	2007	2011
Algeria	30	30	30
Egypt	30	30	30
Israel	90	90	90
Jordan	20	20	20
Lebanon	30	30	30
Morocco	30	30	30
Palestine**	10	10	10
Syria	10	10	10
Tunisia	30	30	30
Turkey	40	40	40
SEMCs*	48	45	45

[28] See the World Bank's Doing Business website for more details on the methodology (http://www.doingbusiness.org/methodology/getting-credit).

Table 12. Strength of legal rights, by country and region (% of maximum score) (continued)

Cyprus	..	90	90
France	40	70	70
Greece	40	40	40
Italy	30	30	30
Malta	..	..	30
Portugal	30	30	30
Spain	60	60	60
EU-MED*	41	56	57
AVG	41	56	56
STDEV	12	18	18
SEMCs w/o IL*	32	33	33

* Regional averages are weighted by total banking assets.

** Data for West Bank and Gaza.

Note: Higher values represent more independence as a share of a maximum score of 10 points.

Source: World Bank Doing Business.

The second index measures the availability, coverage and depth of credit information, either through public credit registries or private credit bureaus. The relevant questions relate to the i) collection of both positive and negative information, ii) collection of data on firms and information, iii) collection of data from retailers and utility companies, iv) availability of credit history for at least two years, v) availability of data on small loans (i.e. less than 1% of annual incomes) and vi) ability of borrowers to access their credit history. As above, an affirmative answer to any one of these questions leads to an additional score for the credit information index.

Figure 13 and Table 13 clearly show that the SEMCs have progressively closed the gap with the EU-MED in terms of the depth of credit information. The average score of the SEMCs in the last survey was even higher than the score of their EU-MED counterparts. In recent years, the credit bureaus in Algeria, Egypt, Morocco, Palestine and Tunisia have improved their information provisioning substantially. In the more recent Doing Business survey, Egypt even satisfied all of the six criteria. The credit bureaus in Lebanon, Morocco, Tunisia and Turkey only failed to satisfy the criteria to also collect data from retailers and utility companies. Similarly, the credit bureau in Israel also met five of the criteria, but it did not report both positive and negative credit information. Jordan and Syria are clearly outliers in the southern and eastern Mediterranean; exceptionally, both countries have credit bureaus that only met two of the criteria.

Figure 13. Depth of credit information, by region (% of maximum score)

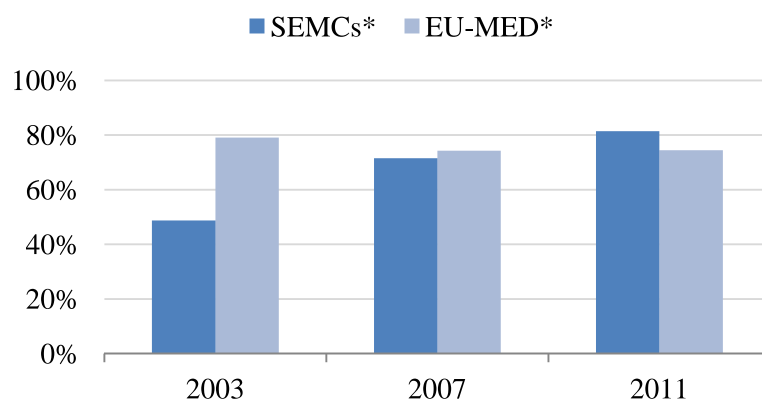


Table 13. Depth of credit information, by country and region (% of maximum score)

	2003	2007	2011
Algeria	17	33	67
Egypt	33	83	100
Israel	50	83	83
Jordan	33	33	33
Lebanon	67	83	83
Morocco	17	33	83
Palestine**	0	50	67
Syria	0	0	33
Tunisia	33	83	83
Turkey	83	83	83
SEMCs*	49	72	81
Cyprus	..	0	33
France	67	67	67
Greece	67	67	83
Italy	100	83	83
Malta	..	..	0
Portugal	83	83	83
Spain	83	83	83
EU-MED*	79	74	74
AVG	77	74	75
STDEV	17	11	11

* Regional averages are weighted by total banking assets.

** Data for West Bank and Gaza.

Note: Higher values represent greater independence as a share of a maximum score of 6 points.

Source: World Bank Doing Business.

Turning to the EU-MED countries, Cyprus and Malta are exceptions with low scores. In Cyprus, the private credit bureau only meets two criteria and in Malta there is no credit bureau at all. More broadly, the other EU-MED countries comply with almost all of the criteria. Like many of their SEMC counterparts, French, Greek, Italian and Portuguese credit registries do not collect information from retailers or utility companies. Moreover, the French credit bureau does not provide both positive and negative information. The Spanish credit bureaus do not distribute historical credit information of more than two years, but meet all the other criteria.

In summing up, the figures above show that substantial reforms in recent years have helped the SEMCs clearly to close the gap with the EU-MED countries in terms of the use of credit information. The same cannot be said concerning the strength of legal rights; the EU-MED countries' average is clearly higher than that of the SEMCs.

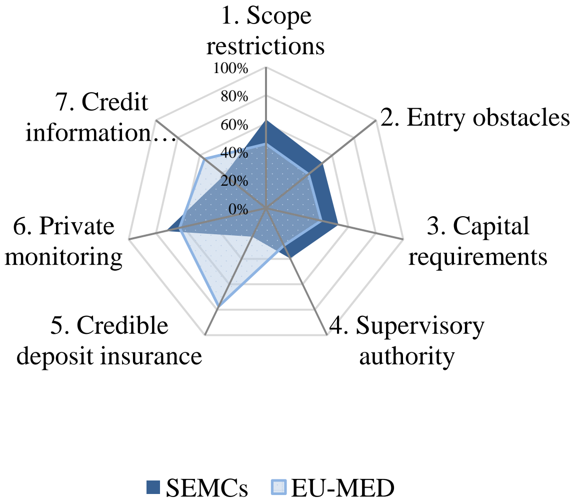
4. Conclusions

The previous section reviewed the quality and the level of convergence of the regulatory and supervisory structures of the SEMCs and EU-MED countries. The assessment included seven dimensions, including the scope of banking, entry obstacles, the stringency of capital requirements, the power and independence of the supervisory authority, the incentives provided by the deposit insurance scheme, private monitoring, and creditors' rights and access to information. This section provides a summary of these areas, offering a comparative analysis of the seven composite indicators that aggregate the relevant indices.

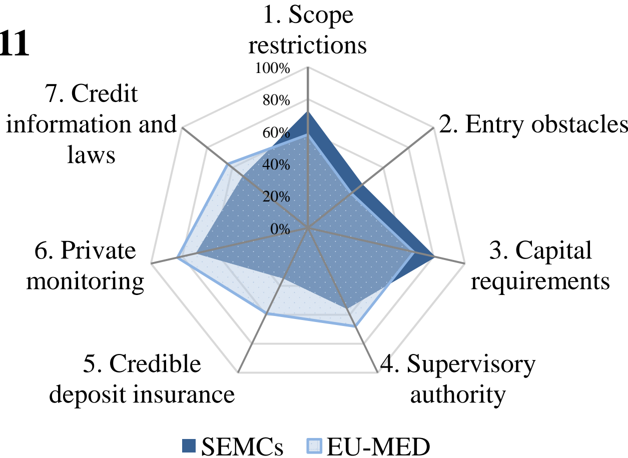
The diagrams in Figure 14 and the summary in Table 14 show the key remaining weaknesses that distinguish the SEMCs from their counterparts in the EU-MED.

Figure 14. Regulatory standards in the SEMCs and EU-MED region

2003



2011



Note: The figures above sum up the SEMC and EU-MED weighted averages for the regulatory indices in each of the seven areas discussed in sections 3.1 to 3.7.

The collective assessment of the convergence of the regulatory and supervisory structures of the SEMCs with the EU-MED standards gives a mixed picture (Figure 14 and Table 14). Despite some improvements, key weaknesses remain in deposit insurance, entry obstacles and the strength of legal rights. Moreover, some disparities have also become more apparent, especially in the potential for political interference and private monitoring.

The deposit insurance index has failed to improve in recent years, because the Egyptian, Israeli, Palestinian, Syrian and Tunisian authorities have chosen not to put in place an explicit insurance scheme. As discussed in section 3.5, implicit schemes may enhance risk-taking through a blanket government guarantee for the leading institutions. In addition, in Algeria, Jordan, Lebanon and Morocco, no effort has been made to align the banks' incentives by implementing risk-based premiums or co-insurance schemes, which would help internalise some of the costs to the deposit guarantee schemes that stem from excessive risk-taking.

Table 14. Summary of key regulatory weaknesses in the SEMCs

	Description	General remarks	Algeria	Egypt	Israel	Jordan
AREA I. Scope restrictions	Restrictions on or prohibition of various activities	Slightly more stringent than EU-MED standards	Some restrictions on real estate; insurance activities prohibited	Some restrictions on insurance & real estate	Some restrictions on securities trading & insurance; real estate activities prohibited	Some restrictions on securities trading & insurance; real estate activities prohibited
AREA II. Entry obstacles	Licensing, foreign entry & presence of public banks	Below EU-MED standards due to foreign denials & the role of government	Public banks represent >90% of bank activity	Foreign denials; public banks represent > 60% of bank activity		Foreign denials
AREA III. Capital requirements	Extent to which capital requirements restrict risks	More stringent capital requirements than the EU-MED		Market risks not considered		
AREA IV. Supervisory authority	Ability of supervisors to prevent & correct problems	Below EU-MED standards due potential for political interference	High potential for political interference	Some potential for interference	High potential for political interference	Some potential for interference
AREA V. Deposit insurance	Presence of an explicit scheme & mitigation of moral hazard	Below EU-MED standards due to the implicit insurance & adverse incentives	No co-insurance or risk-adjusted premiums	No explicit deposit insurance scheme	No explicit deposit insurance scheme	No co-insurance or risk-adjusted premiums
AREA VI. Private monitoring	Availability of reliable & timely information to investors	Increasing disparity due to limited rated banks and flexibility in accounting	Top banks not rated; flexibility in accounting	Several top banks not rated	Several top banks not rated	Several top banks not rated
AREA VII. Credit info. & laws	Ability of legal & information systems to facilitate lending	Below EU-MED standards due to deficient legal rights	No private credit registry; limited legal rights for creditors	Limited legal rights for creditors		No private credit registry; limited legal rights for creditors

Table 14. Key regulatory weaknesses in the SEMCs (continued)

	Lebanon	**Morocco**	**Palestine**	**Syria**	**Tunisia**	**Turkey**
AREA I. Scope restrictions	Real estate activities prohibited	Some restrictions on insurance; real estate activities prohibited		Insurance & real estate activities prohibited	Some restrictions on securities & insurance	Some restrictions on insurance; real estate activities prohibited
AREA II. Entry obstacles	Public bank activity	Foreign denials		Public banks represent >70% of bank activity	Public banks have a diminishing role	Foreign denials; Public banks represent >30% of bank activity
AREA III. Capital requirements	Broad definition of capital			Broad definition of capital		
AREA IV. Supervisory authority	High potential for political interference	Some potential for interference	Some potential for interference	High potential for political interference	Some potential for interference	Some potential for interference
AREA V. Deposit insurance	No co-insurance or risk-adjusted premiums	No co-insurance or risk-adjusted premiums	No explicit deposit insurance scheme	No explicit deposit insurance scheme	No explicit deposit insurance scheme	No co-insurance
AREA VI. Private monitoring	Several top banks not rated	Several top banks not rated; flexibility in accounting	Several top banks not rated	Several top banks not rated	Flexibility in accounting rules; no risk management disclosure	Flexibility in accounting
AREA VII. Credit info. & laws	No private credit registry; limited legal rights for creditors	Limited legal rights for creditors	No private credit registry; barely any legal rights for creditors	No private credit registry; barely any legal rights for creditors	No private credit registry; limited legal rights for creditors	Limited legal rights for creditors

Source: Authors' compilation.

Another major issue, the presence of entry obstacles, continues to be a key weakness in the regulatory structures of the region. Although the licensing requirements exhibit similarities on both shores of the Mediterranean, other indicators point at substantial barriers to entry. Government ownership, which is widespread in the region, gives undue advantages to incumbent banks and restricts entry incentives. In Algeria, Egypt and Syria as well as to some extent Morocco, Tunisia and Turkey, government ownership remains significant. Although government ownership may have some benefits, the authorities have to ensure that such roles are well defined within a national strategy with clear objectives and instruments, and that they do not represent an obstacle to the development of the financial system.[29] The rates of foreign denials are also very high, further supporting the idea of substantial entry barriers and competitive advantages enjoyed by domestic incumbent banks.

In addition to the two key weaknesses summarised above, the 2011 survey points at three new concerns. Poor accounting practices have contributed to an increasing disparity in private monitoring indices. Furthermore, political interference has become a significant possibility, potentially undermining supervisory authority and reinforcing the governments' direct control – an additional concern for the competitiveness and efficiency of the banking sector (Casu & Ferrari, 2013). As the eruption of public discontent in Tunisia and Egypt in early 2011 clearly attests, the region's governments have attempted to maintain (perhaps for far too long) a tight grip on their countries' political and economic systems. It is exactly such forms of interference that may conflict with the objectives of the financial and competition authorities.

In contrast, the SEMCs have implemented a number of reforms to improve the availability and use of credit information by financial institutions. Egypt, and more recently Morocco, established private credit bureaus in 2006 and 2009, respectively. The SEMC–EU gap has been bridged. The SEMCs' average is now above the EU-MED average. Algeria, Israel, Jordan, Lebanon and Tunisia continue to rely solely on public registries, three of them meeting all the criteria except collecting credit information on retail stores or utility companies. The same applies to Turkey, which has both public and private credit bureaus. Although the literature provides little guidance, private credit bureaus have better access to new technologies and know-how to ensure that information-sharing mechanisms work effectively. The countries in the region should continue to monitor developments and spearhead innovative systems to use the stock of information and infrastructure already set up by the public systems.[30]

[29] Rocha et al. (2010) notes the essential role that public banks fulfil in the region by providing financing to the SMEs. The authors note that private banks are unable to fill this gap largely owing to the generally weak quality of the financial infrastructure, including the availability and reliability of information on potential borrowers.

[30] Morocco may serve as an interesting example, by effectively combining the data collection roles and capacities of the Bank Al-Maghrib, which operates the public registry, with the newly established private credit bureau, Experian-Morocco. For a comparative analysis of the Moroccan and Egyptian credit information systems, see Madeddu (2010, pp. 21-23).

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About MEDPRO

MEDPRO – Mediterranean Prospects – is a consortium of 17 highly reputed institutions from throughout the Mediterranean funded under the EU's 7th Framework Programme and coordinated by the Centre for European Policy Studies based in Brussels. At its core, MEDPRO explores the key challenges facing the countries in the Southern Mediterranean region in the coming decades. Towards this end, MEDPRO will undertake a prospective analysis, building on scenarios for regional integration and cooperation with the EU up to 2030 and on various impact assessments. A multi-disciplinary approach is taken to the research, which is organised into seven fields of study: geopolitics and governance; demography, health and ageing; management of environment and natural resources; energy and climate change mitigation; economic integration, trade, investment and sectoral analyses; financial services and capital markets; human capital, social protection, inequality and migration. By carrying out this work, MEDPRO aims to deliver a sound scientific underpinning for future policy decisions at both domestic and EU levels.

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Mediterranean countries covered	Algeria, Egypt, Israel, Jordan, Lebanon, Libya, Morocco, Palestine, Syria, Tunisia and Turkey
Coordinator	Dr. Rym Ayadi, Centre for European Policy Studies (CEPS), rym.ayadi@ceps.eu
Consortium	Centre for European Policy Studies, **CEPS**, Belgium; Center for Social and Economic Research, **CASE**, Poland; Cyprus Center for European and International Affairs, **CCEIA**, Cyprus; Fondazione Eni Enrico Mattei, **FEEM**, Italy; Forum Euro-Méditerranéen des Instituts de Sciences Economiques, **FEMISE**, France; Faculty of Economics and Political Sciences, **FEPS**, Egypt; Istituto Affari Internazionali, **IAI**, Italy; Institute of Communication and Computer Systems, **ICCS/NTUA**, Greece; Institut Europeu de la Mediterrania, **IEMed**, Spain; Institut Marocain des Relations Internationales, **IMRI**, Morocco; Istituto di Studi per l'Integrazione dei Sistemi, **ISIS**, Italy; Institut Tunisien de la Compétitivité et des Etudes Quantitatives, **ITCEQ**, Tunisia; Mediterranean Agronomic Institute of Bari, **MAIB**, Italy; Palestine Economic Policy Research Institute, **MAS**, Palestine; Netherlands Interdisciplinary Demographic Institute, **NIDI**, Netherlands; Universidad Politecnica de Madrid, **UPM**, Spain; Centre for European Economic Research, **ZEW**, Germany
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Website	www.medpro-foresight.eu
Contact e-mail	medpro@ceps.eu