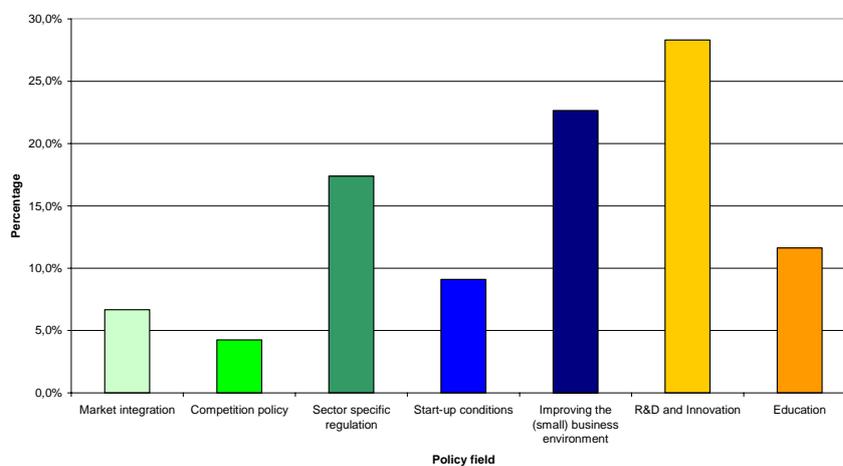




# A descriptive analysis of Member States' microeconomic reforms based on the MICREF database and 2004-2006 data

Dirk Zeitz and Elena Arjona Perez

Graph 2 Share of measures across policy fields 2004-2006



EUR 23575 EN - 2008

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JRC 48298

EUR 23575 EN  
ISSN 1018-5593

Luxembourg: Office for Official Publications of the European Communities

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# A descriptive analysis of EU Member States' microeconomic reforms based on the MICREF database and 2004-2006 data

by Dirk Zeitz and Elena Arjona Perez\*

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\* We would like to thank Alexander Loschky for his ideas and comments to improve this report.

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## **Abstract**

The aim of this report is to investigate two main aspects of EU Member States' (MS) microeconomic reforms: the policy priorities and the characteristics of the reforms. The analysis is based on the recently published database on microeconomic reforms MICREF. The data for the years 2004-2006 has been approved by MS and is publicly available since end July 2008 on the web pages of the Directorate General for Economic and Financial Affairs (DG ECFIN). The Joint Research Center (JRC) has been involved in the process of setting up and populating this database since April 2007.

The report highlights that the quality of the analysis of the reform processes based on the MICREF database depends on the comparability and completeness of the dataset. Regarding the reform activity, while we find that Member States set different priorities within the microeconomic area, most of them carried out reforms primarily in the policy field "R&D and innovation". A second observation is that the reform profiles are evolving over time: the share of reforms concentrated on "sector-specific regulation" declined, whereas the relevance of reforms addressing "improvement of the business environment" and "education" increased over the period 2004-2006. The low data density along the features describing the qualitative characteristics of reforms does not allow drawing definite conclusions. However, based on the data available there is evidence for differences in some reform characteristics at the level of policy fields. In particular, the analysis of stakeholder's involvement shows that sectoral federations are the stakeholders most actively involved in the reform process. Moreover, we find that reform measures seek to affect the economy through different microeconomic channels. Furthermore, most reform measures are not stand-alone initiatives but form part of reform packages.

# 1. Background and Introduction

Microeconomic reforms are an important factor for future growth and jobs (see e.g. Griffith et al.(2006)). The rationale is that microeconomic reforms can create a conducive environment for increasing economic productivity, laying thereby the foundation for sustainable future growth.

One objective of microeconomic reforms is therefore to provide for fair competition between suppliers within and between different markets (by improving integration of markets, providing an appropriate competition policy and regulation within sectors), that gives incentives for innovative activities but ensures a reasonable price level for consumers (in particular for services of general economic interest). However, microeconomic reforms aim not only to improve the conditions for fair competition but also to set incentives so as to increase the productivity of the society in a knowledge-based economy (by supporting an efficient and effective allocation of resources towards R&D and education), and to promote economic activity (by improving the business environment and by facilitating conditions for entrepreneurs).

While the importance of microeconomic reforms is indisputable, little is known about the preferred strategies of countries within the microeconomic area (reforms in the areas of product markets, business environment and the knowledge-based economy). The recent literature is constrained by the availability of data on structural reforms. Indicators measuring the degree of restrictiveness of government regulation have been developed (for instance the OECD Product Market Regulation (PMR) Indicators, and the FRASER Index of Economic Freedom). Changes in the level of these indicators are usually considered to be reforms but the reform as such i.e. the event that has caused the change in the level of regulation and its main characteristics are not observable. These indicators are not available continuously; they measure the level of regulation at a given point in time. Furthermore, we know little about how microeconomic reforms are implemented and their main characteristics. The present report investigates these issues using the MICREF database, a database of microeconomic reforms jointly developed by DG ECFIN, DG ENTR and JRC.

The objective of the MICREF initiative is to help monitor and analyse the reform process and to improve the surveillance of microeconomic reforms in the EU Member States. The database records the regulatory reforms and actions taken by the governments in real time. This is the main difference with the OECD Product Market Regulation database which provides the “stock” of regulation based on a set of institutional features within different policy areas or sectors defined ex-ante (see Conway et al. (2006)).<sup>1</sup>

The MICREF initiative builds on the request of the Economic Policy Committee (EPC) to “contribute to the establishment of selected catalogues of structural reforms, indicators

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<sup>1</sup> Information on the OCED PMR can be found under:  
[http://www.oecd.org/document/1/0,3343,en\\_2649\\_34323\\_2367297\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/1/0,3343,en_2649_34323_2367297_1_1_1_1,00.html)

and best practice comparisons to strengthen the systematic recording of reform measures (in the context of the Lisbon Strategy and the Integrated Guidelines)". The Commission services proposed in 2006 the creation of a database of microeconomic reforms and the development of tools to assess reform processes. The MICREF database is foreseen as an inventory of new measures and changes in the implementation framework of existing reforms. MICREF systematically summarises the information on reform progress provided by the Lisbon Strategy related National Reform Programmes (NRP) and the NRP Implementation Reports. The Cardiff Reports are used as information source to cover the preceding years. MICREF is intended to reveal the actual implementation of microeconomic reforms and facilitate cross-country comparisons of priorities. It complements the LABREF database on labour market reforms. MICREF is available to the general public since July 2008.<sup>2</sup>

Some features of the database constitute a challenge for the comparability of the data and the identification of significant results. In effect, MICREF provides mostly qualitative data, the sources of information are heterogeneous in quantity and quality, and the database contains reform measures that are considered significant by the Member States whilst the notion of "significant reform" may be different across countries.

In spite of the above-mentioned limitations, MICREF constitutes a good source of information on recent reforms. In this paper we first outline the reform activity of Member States over the period 2004-2006 and then explore the characteristics of those microeconomic reform measures (through selected descriptive features).

The report is organised as follows. Section 2 briefly presents the structure and the main features of the MICREF database. The analytical sections 3 and 4 contain a description of Member States' reform activity, and an exploration of characteristics of microeconomic reforms. Section 5 summarises the findings.

## **2. Description of the MICREF database**

The purpose of the database MICREF is to monitor and analyse the microeconomic reforms undertaken by the Member States. The focus of MICREF is on new reform measures. It is not to give a complete overview of all the existing government activities in the area of microeconomic reforms. According to the MICREF user guide, a measure relevant for inclusion in the database can have different shapes.<sup>3</sup> The concept of "measure" has a broader meaning than "structural reform" (for example, the database also comprises key steps in implementation processes).<sup>4</sup> MICREF inventories measures - of regulatory nature as well as actions or projects - on an annual basis. As for the concept of "significant" measure, it is for the compiler to make a judgement on whether a

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<sup>2</sup> [http://ec.europa.eu/economy\\_finance/db\\_indicators/db\\_indicators10938\\_en.htm](http://ec.europa.eu/economy_finance/db_indicators/db_indicators10938_en.htm)

<sup>3</sup> [http://ec.europa.eu/economy\\_finance/publications/publication13022\\_en.pdf](http://ec.europa.eu/economy_finance/publications/publication13022_en.pdf)

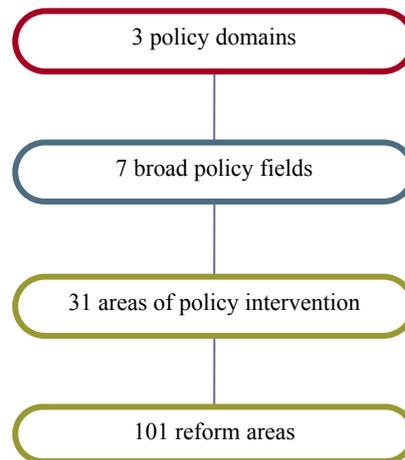
<sup>4</sup> The user guide provides a more detailed description of the different types of measures under the coverage of MICREF. Each type of measure is not a category under which reforms should be classified; the different shapes that a measure can take are listed with the only purpose of clarifying the scope of the database.

measure mentioned by a MS in a NRP Implementation Report is important enough to have an impact on the creation of growth and jobs supported by the Lisbon Agenda. Furthermore, unlike the tables enclosed to the NRP Implementation Reports, MICREF records only adopted reform measures.

The database classifies microeconomic reforms and describes their main characteristics, which makes it suitable for our investigation.

Concerning the classification of the reforms, the MICREF database reflects the concept of the Lisbon Integrated Guidelines that microeconomic reforms can improve the productivity of an economy through better performing open product markets and more investment in the knowledge-based economy.<sup>5</sup> The database is organised around three thematic *policy domains* (“product markets: open and competitive markets”; “product markets: business environment and entrepreneurship”; and “knowledge-based economy”) which are further structured into 7 *broad policy fields*. Each broad policy field is subdivided into *areas of policy intervention* (31 areas in total) which are in turn disaggregated into *reform areas* (101 in total).

### Structure of the MICREF database



Although the MICREF database comprehensively describes the initiatives of Member States in the microeconomic area, there are border cases of reforms that can have side effects on the players of the economy, even though the measure does not fall under the scope of MICREF. Examples would be reforms addressing energy efficiency, infrastructure or life-long learning. Moreover, the database does not record measures affecting financial markets.

MICREF provides information on main characteristics of each reform. The measures stored in the database are depicted by 11 descriptive features:

---

<sup>5</sup> The guidelines are described in the Communication COM(2007) 802, which can be downloaded under [http://ec.europa.eu/growthandjobs/pdf/european-dimension-200712-annual-progress-report/200712-annual-report-integrated-guidelines\\_en.pdf](http://ec.europa.eu/growthandjobs/pdf/european-dimension-200712-annual-progress-report/200712-annual-report-integrated-guidelines_en.pdf).

(Title of the measure)

1. General Description
2. Reference (type of legal document used as reference)
3. Source of information
4. Date of adoption of the measure (DD/MM/YYYY)
5. Date of implementation of the measure (DD/MM/YYYY)
6. Budgetary impact on
  - a) Revenues
    - aa) Absolute amount
    - ab) Starting year
    - ac) End year
  - b) Expenditures
    - ba) Absolute amount
    - bb) Starting year
    - bc) End year
7. Involvement of major stakeholders
  - a) Sectoral federations
  - b) Trade Unions
  - c) Consumers
  - d) Others
8. Is the measure part of a reform package?
  - a) How many policy domains are affected?
  - b) Which is the main policy domain affected?
9.
  - a) Are monitoring procedures put in place?
  - b) Monitoring body
  - c) How frequent does monitoring take place?
  - d) Are evaluating procedures put in place?
  - e) Evaluating body
10. Main Impact (channel) of the reform measure
11. Economic importance of the sector

Some descriptive features are mandatory: title, general description, legal reference, year of adoption, source of information. If this basic information is not made available by MS, the measure is not recorded in the database. For some descriptive features, the database foresees a set of questions (which the compiler has to address using a menu of pre-defined answers).<sup>6</sup> Therefore, the data on each descriptive feature is made up by a set of information on its specific attributes (as shown above).

---

<sup>6</sup> As for example, the information on the descriptive feature "Monitoring and Evaluation procedures" is obtained through the following questions: "Are monitoring procedures put in place? (answer: Yes/No)" "Monitoring frequency? (answer: Quarterly/Yearly/Biannually/Irregularly)", "Monitoring body? (answer: Independent body/Other)".

### 3. Reform activity over the period 2004-2006

The literature provides different rationales for reform processes (see IMF (2004) for an overview). The most common determinants of reform processes are initial structural conditions, international factors and openness, macroeconomic conditions and the specificities of the national policy making process. For instance, reforms might be undertaken if a country is in a bad economic situation (back against the wall or TINA approach) or to exploit a buoyant economic situation to maintain the growth path (window of opportunity).<sup>7</sup> Moreover, political or election cycles play a role for the timing of reforms. The literature discusses as well the sequence of reforms within or between different areas of reforms (financial markets, labour markets, product markets). One crucial element is that reforms require political support since there can be short-term adjustment costs whereas the long-term benefits of reforms are uncertain.

Even though these are interesting questions to be further investigated, and MICREF might be a tool to address them, in a first step we would like to follow a descriptive approach. Which determinants have a significant impact on the chosen reform path of EU Member States could be a question for future research, once the dataset becomes more robust.

Before moving to the analysis of the reform activity, we need to be aware of the potential limitations that can influence the comparability of the data across Member States. In particular, we need to consider that the concept of “reform” may vary across countries and therefore comparing the number of reforms across countries may be debatable. Adding up measures from different countries presupposes that 1) the notion of “measure” does not differ between countries and 2) the sources of information used for the collection of data are similar in quantity and quality across countries.

As an example of diverging notions of “measure” we shall mention that some countries report as new measures what other Member States regard as just a step in the implementation process (and therefore do not include in Implementation Reports). Concerning the sources of information, the number of measures stored in the database depends on a) the availability, b) the quality and c) the scope of the documents used for the collection of data. For instance, Bulgaria and Romania are the Member States for which we have found the smallest number of reforms undertaken over the period 2004-2006. This is due to the fact that the standard data sources for those countries (NRP and NRP Implementation Reports) were not available. Regarding the scope, some countries with federal structures provide detailed information also on reforms in the realm of regional governments while other Member States report only measures adopted at the federal level. The verification of the dataset by MS was intended to correct to some extent the bias introduced by the heterogeneity of the data sources. However, not all MS have participated in the same degree in this exercise.

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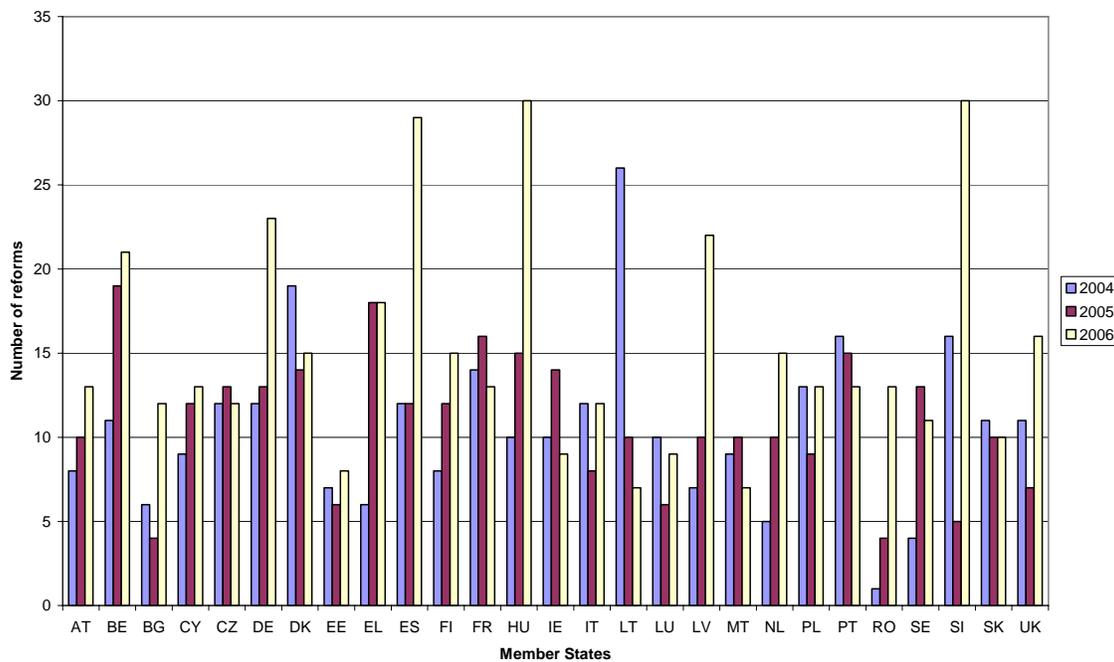
<sup>7</sup> The TINA approach refers to the "There is no alternative" idea.

In this section we first give an overview of the reforms published in MICREF by mid-October 2008. We then move from counting measures to comparing relative concepts (such as the share of total measures adopted by a country that are undertaken under a specific policy field) since this can reduce to some extent the bias referred to above. This approach is used in sub-sections 3.2 and 3.3 to analyse the EU-27 policy priorities for the whole period and by year as well as the policy profiles per country. In short, we are investigating on which fields the reforms focussed and which conclusions can be drawn about the reform activity so far.

### 3.1 General description of the information contained in the dataset

The published version of the MICREF database contained 989 microeconomic reform measures adopted during 2004-2006 in the EU-27 (285 measures in 2004, 295 in 2005 and 409 measures in 2006).

**Graph 1: Reforms by MS and year**



Graph 1 shows the number of microeconomic reforms approved by Member States and published on the web pages of DG ECFIN. As clarified above, the interpretation should be made very carefully, since the comparability across countries cannot be fully ensured and the dataset even for the period already verified might change in the future due to the following reasons:

- a) Information taken from the Implementation Reports usually does not cover the entire year in which the report is submitted to the Commission.<sup>8</sup>
- b) Member States were provided with the opportunity to propose modifications on measures published at any time. This allows also asking for the inclusion of measures adopted in the years already published.
- c) With the launch of the database for the first time, Member States can compare own reform measures with the ones of another MS. This might lead to a more harmonised understanding of a “reform measure” in the sense of MICREF.

Graph 1 does not intend to depict the reform activity and it cannot be interpreted as a ranking across countries, since no assessment is made of the potential impact of any given measure on growth and jobs. The database contains the measures that each Member State considers important enough to be included in MICREF. The rule is to include a measure only once in the database. This may cause problems when a measure can not be disentangled. For example, a revision of the competition law may affect several reform areas of MICREF (antitrust regulations, powers and means of the competition authority, concentration regulation, etc.). In the light of these considerations, an analysis of the reform activity based on the number of reforms across MS would be misleading and is for this reason not made here.

However, we can learn from Graph 1 that most Member States had adopted the largest number of measures in the year 2006. In particular for some MS (DE, ES, HU, LV and SI) the number of reforms approved in 2006 exceeds by far that of the years before. This could be an indication of higher reform activity, but could also be due to the introduction of the reporting grid enclosed to the Implementation Reports that had been used for the first time in 2006. A second reason might be the strong MS participation during the verification process. In fact, ES and SI, proposed a number of new measures to be considered for the year 2006 when they were requested to validate the measures included in the database by the Commission. The question of whether we have seen indeed a higher reform activity towards the end of the period or if the higher number of reforms is due to the factors discussed is therefore difficult to answer.

### **3.2 Policy priorities EU– overview period 2004-2006**

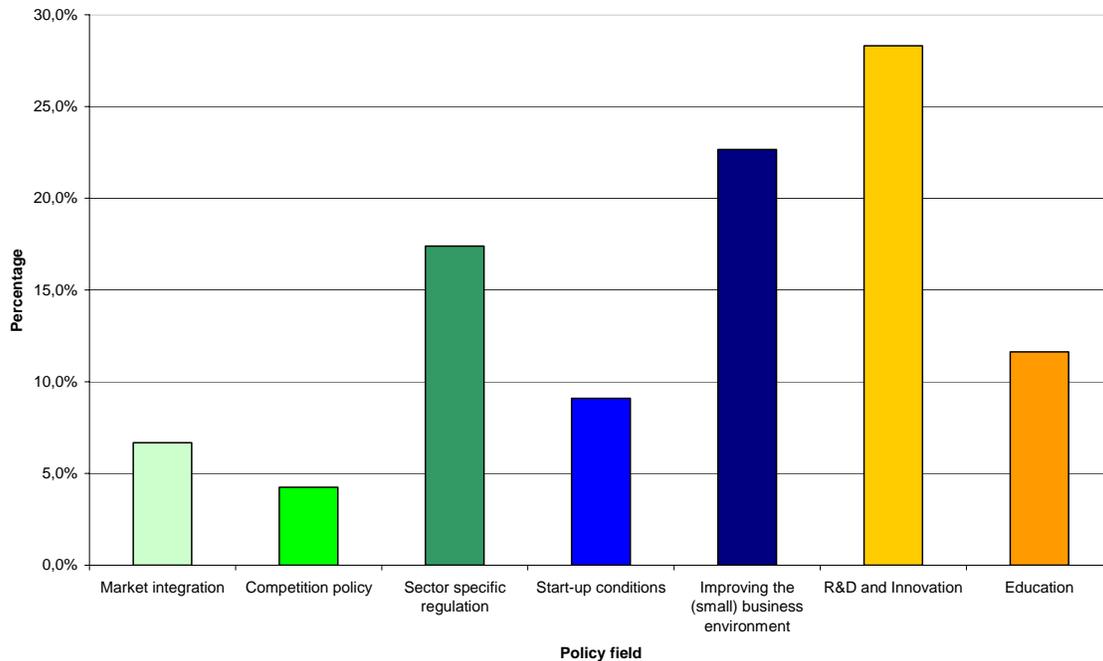
The analysis of the reform activity of the Member States is conditioned by the fact that each country may have a different understanding of the concept of a measure. Since the number of reforms might be misleading for the analysis we would like to focus rather on relative concepts such as the share of measures adopted in a specific policy field (reform profiles). Comparisons of the *reform activity* across countries are therefore only indirectly made by comparing relative concepts such as national reform profiles (instead of comparing the absolute number of reforms).

---

<sup>8</sup> The Implementation Report 2006 covers the reforms adopted till October of that year. Once the Implementation Reports for the 2007 are checked for microeconomic reforms, measures that were adopted in late 2006 might be considered, changing as a consequence the number of measures.

In the following paragraphs we will focus on the entire EU. Moreover, we make this analysis on the level of the 7 broad policy fields. We find that over the years 2004-2006, the Member States gave priority to enhancing and fostering innovation and improving the small business environment – these two fields account for 50% of the reforms undertaken in the EU during the period under study.

**Graph 2: Share of measures across policy fields 2004-2006**



Graph 2 shows the percentage of measures that fall in each of the 7 broad policy fields. The policy fields displayed in green shading (“market integration”, “competition policy”, “sector-specific regulation”) are part of the policy domain “open and competitive markets”; those shown in blue shading (“start-up conditions”, “improving the business environment”) belong to the policy domain “business environment and entrepreneurship” and the ones yellow-orange coloured (“R&D and innovation”, “education”) form part of the policy domain “knowledge-based economy”. We find that, over the whole period, the policy field “R&D and innovation” with a share of 28,3% is the policy field in which most microeconomic reforms were concentrated. The policy field with the second largest share of measures is “improving the business environment” (22,6%), followed by “sector-specific regulation” (17,4%%). The smallest share of reforms (4,2%) focussed on “competition policy”.

The reform profile for the EU-27 has changed over time. Three trends can be observed (see Table 1). First, the share of measures concentrated on “sector-specific regulation” declined over the period. While in 2004 this policy field was still the predominant target of reforms, it dropped to fourth place in 2006. Second, the share of reforms undertaken to improve the business environment has continuously increased from 18,3% in 2004 to

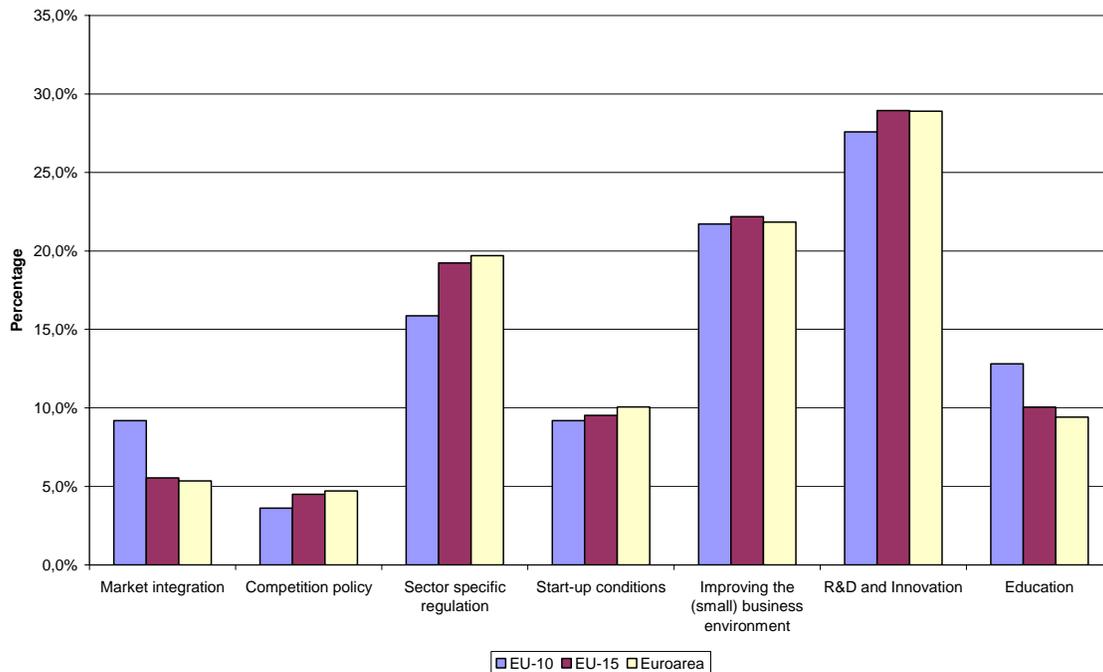
26,4% in 2006. The same trend could be observed in the field “education” whose share of measures rose from 8,4% to 13,0%.

**Table 1: Evolution of the EU-27 reform profile**

		Market integration	Competition policy	Sector specific regulation	Start-up conditions	Improving the (small) business environment	R&D and Innovation	Education	Total
2004	Reforms	33	21	77	21	55	54	24	285
	%	11,6%	7,4%	27,0%	7,4%	19,3%	18,9%	8,4%	100,0%
2005	Reforms	7	8	49	33	61	99	38	295
	%	2,4%	2,7%	16,6%	11,2%	20,7%	33,6%	12,9%	100,0%
2006	Reforms	26	13	46	36	108	127	53	409
	%	6,4%	3,2%	11,2%	8,8%	26,4%	31,1%	13,0%	100,0%
Total	Reforms	66	42	172	90	224	280	115	989
	%	6,7%	4,2%	17,4%	9,1%	22,6%	28,3%	11,6%	100,0%

The comparison of the reform activity between the old MS (EU-15), the MS that joined the EU in 2004 and the members of the Euro area also yields interesting results. We find slightly different reform patterns for those groups of countries (Graph 3) for the total period.

**Graph 3: Reforms by policy fields of EU-15, EU-10 and Euro area**



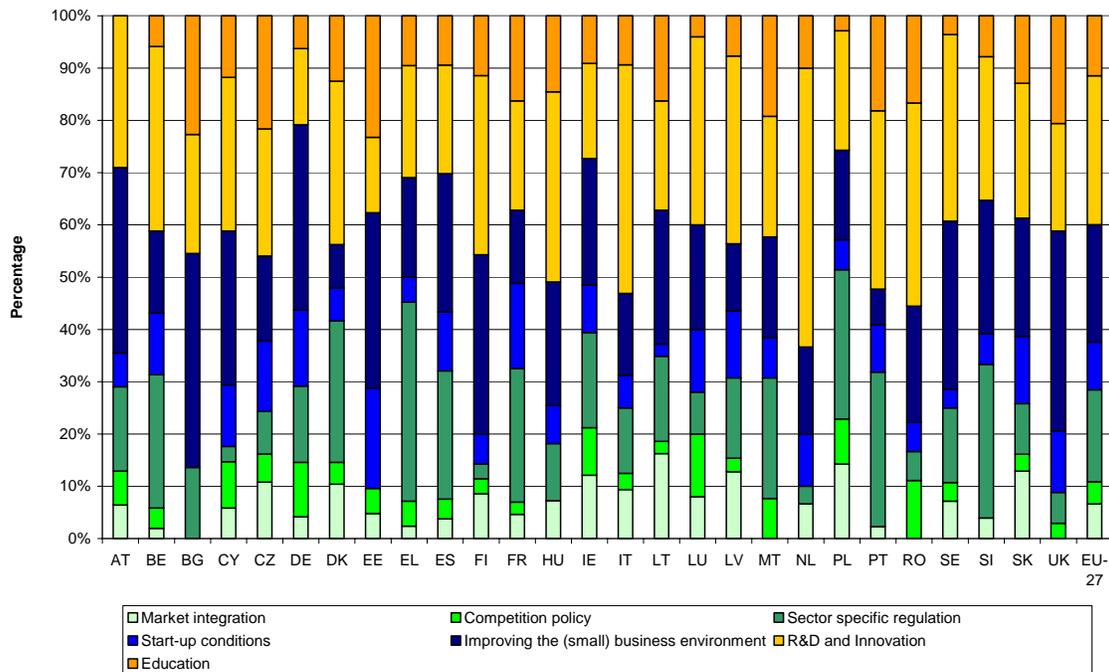
We see that the reform profiles of EU-15 and Euro area are quite similar. They are, however, rather different from the reform profile of the new MS (EU-10). For this group of countries the share of measures aimed at “market integration” is almost twice as high as for the EU-15 and the Euro area. Furthermore, we observe that those countries paid more attention to “education” and concentrated less on “sector-specific regulation”. This preliminary result might be due to different levels of integration within the EU. With

longer time series and a more robust dataset it might be possible to further address this very interesting research question.

### 3.3 National policy priorities

Comparing policy profiles presupposes that MS consistently apply the notion of “measure” across policy areas. This seems to be a reasonable assumption. The following graph shows, for each country, the shares of the 7 broad policy fields for the whole period 2004-2006.

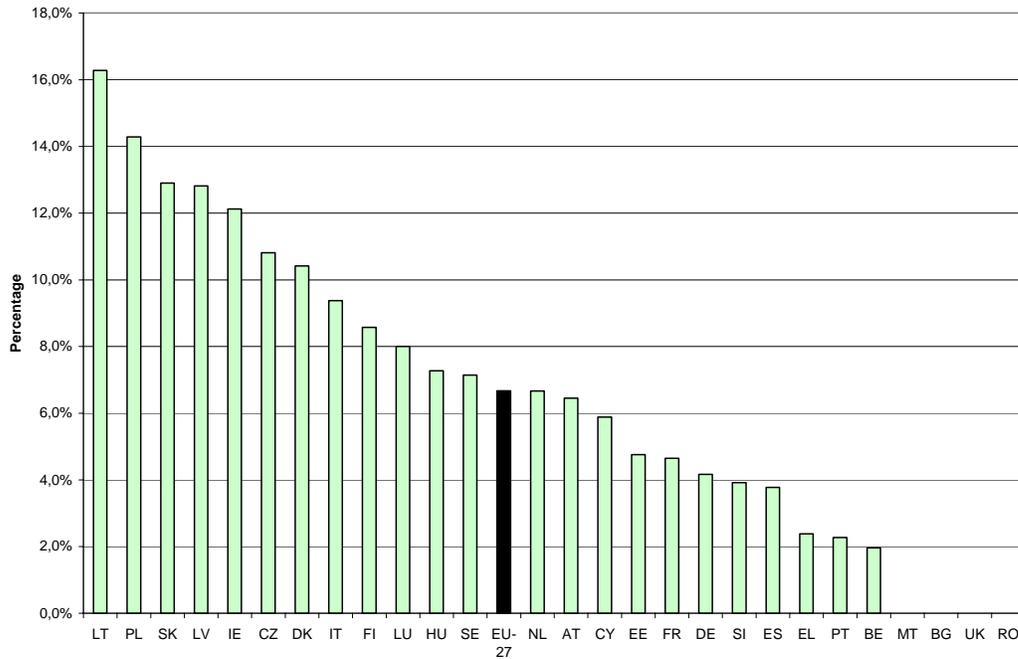
Graph 4: Reform profiles of MS over 2004-2006



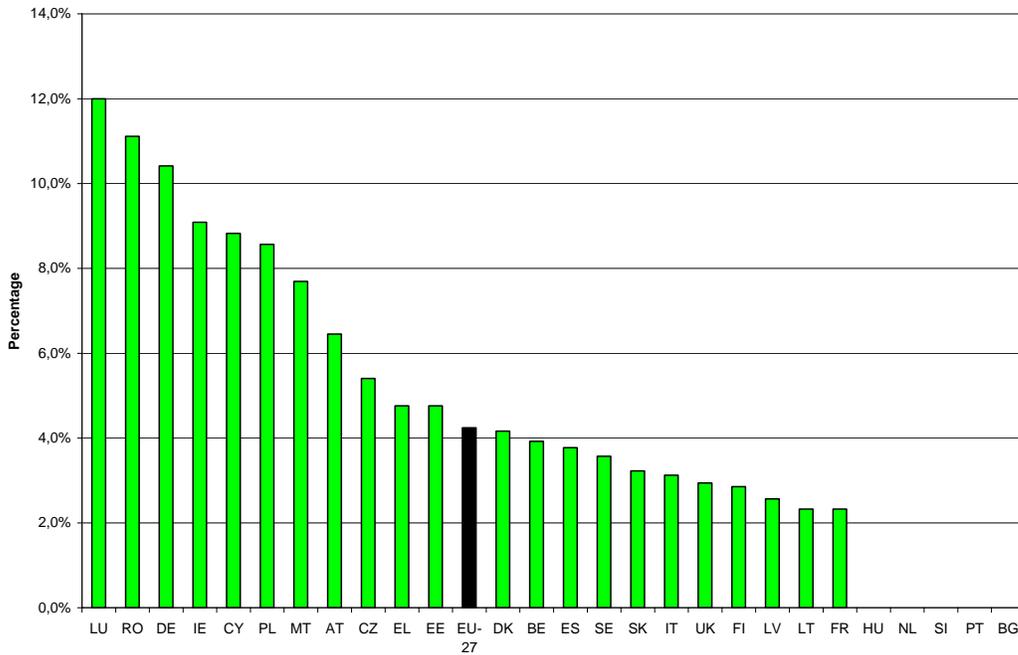
We observe (Graph 4) that the 27 EU Member States set different priorities in the microeconomic area, and we cannot find an identical reform profile for two countries. Altogether, 14 out of 27 Member States prioritised reforms in the policy field “R&D and innovation”.<sup>9</sup> For eight countries (AT, BG, DE, EE, ES, IE, LT, UK) the policy field “improving the business environment” constituted the main priority. Four Member States (EL, FR, PL, SI) concentrated their reform efforts in “sector-specific regulation”. Graph 4 has been split by policy fields to assess whether the relative weight of a given policy field varies much across countries (see Graphs 5-11).

<sup>9</sup> A country is said to prioritise a specific policy field when it carries out most reform activities in this policy field.

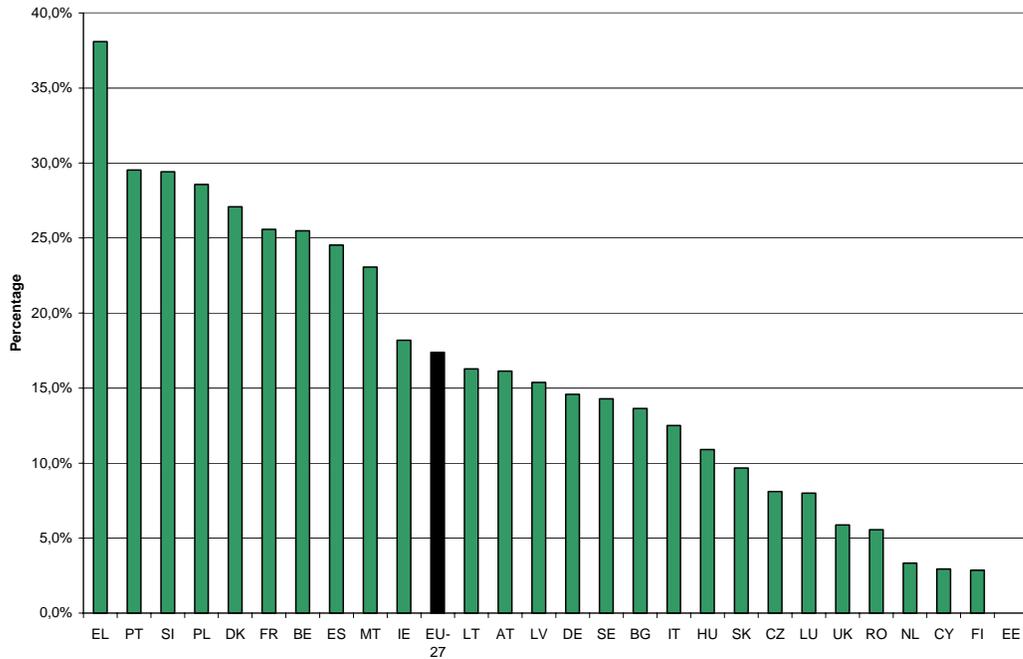
**Graph 5: Percentage of reforms undertaken in “market integration” by MS**



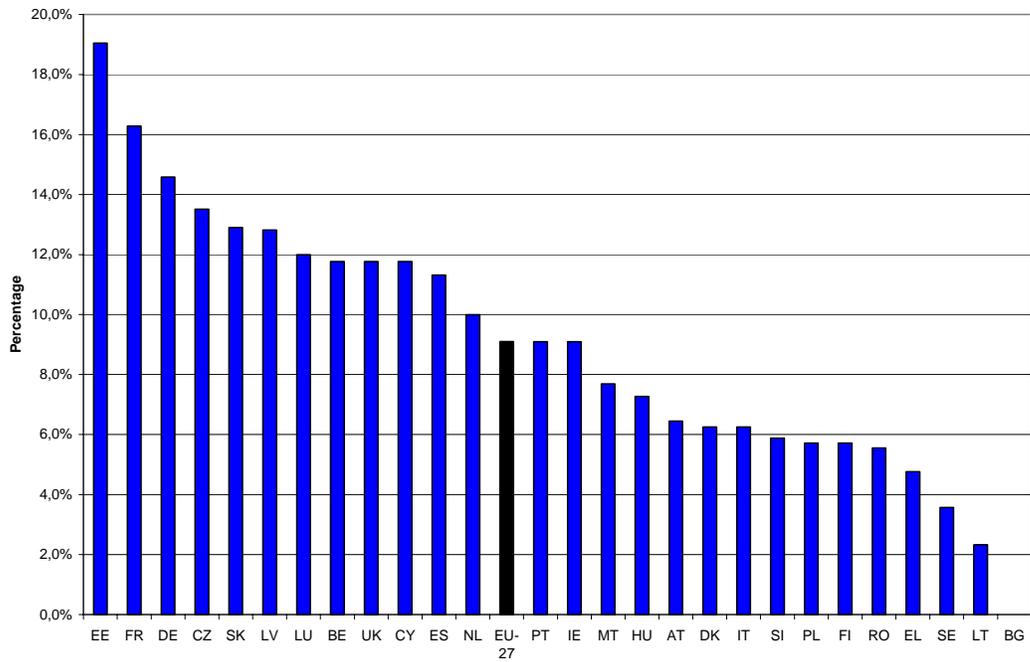
**Graph 6: Percentage of reforms undertaken in “competition policy” by MS**



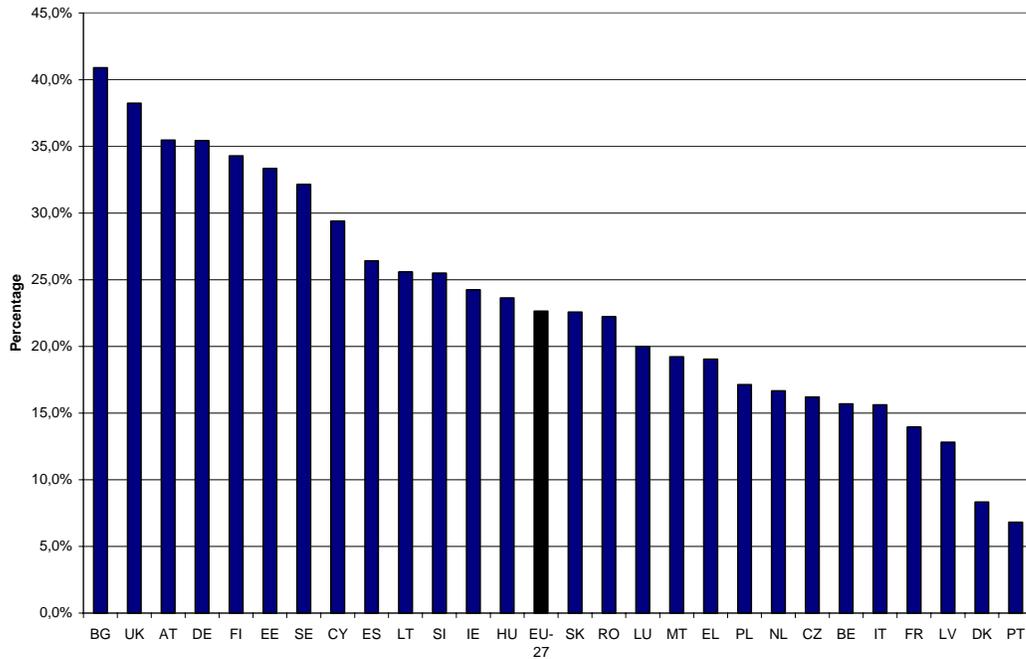
**Graph 7: Percentage of reforms undertaken in “sector-specific regulation” by MS**



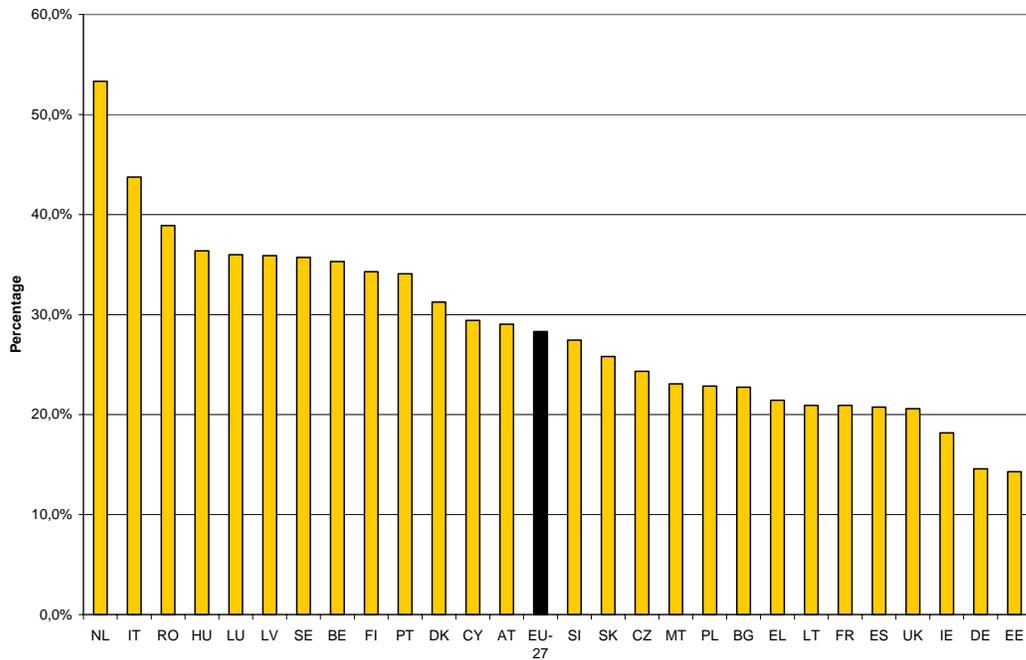
**Graph 8: Percentage of reforms undertaken in “start-up conditions” by MS**



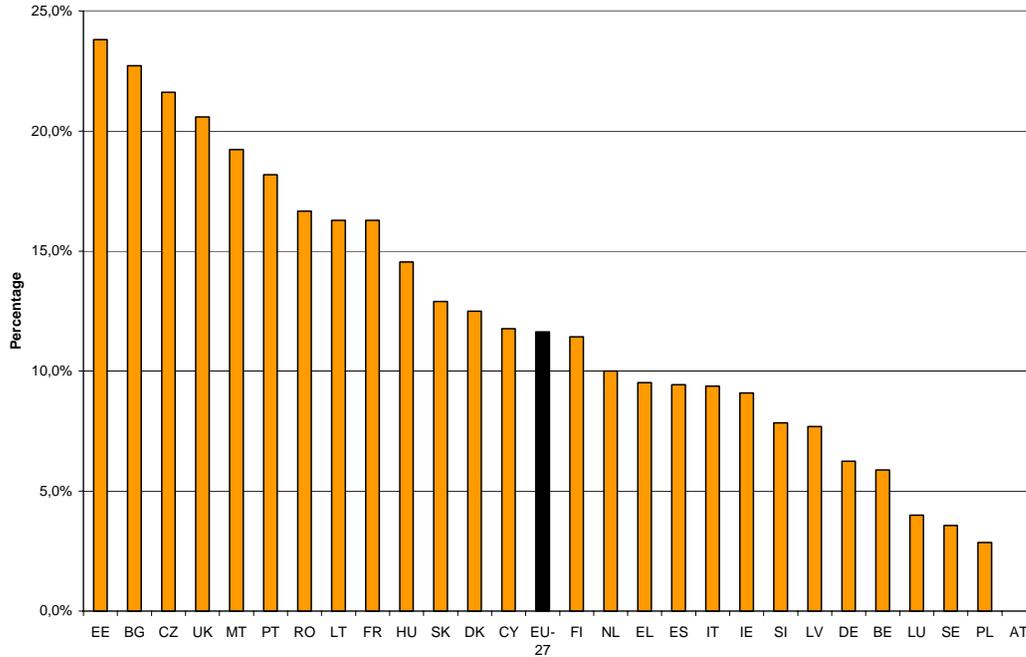
**Graph 9: Percentage of reforms undertaken in “improving the business environment” by MS**



**Graph 10: Percentage of reforms undertaken in “R&D and innovation” by MS**



**Graph 11: Percentage of reforms undertaken in “education” by MS**



The graphs above show that the share of measures attributed by the MS to a specific policy field varies considerably. However, most MS have carried out reforms in all seven broad policy fields. Exceptions are AT, DK, EE, HU, MT, NL, PT, SI, and UK. “Competition policy” and “market integration” are the policy fields that have been addressed by fewer countries.

So far we have presented the 27 reform profiles of the Member States (Graph 4) and showed the relative attention each policy field receives from each Member State (Graphs 5-11). We have seen that MS have different reform profiles. Taking the EU-27 reform profile (Table 1) as a benchmark we investigate next the relative deviation of the national reform profiles. By comparing the policy profile of each MS with a common reference we aim to show the differences in the relative prioritisation of the policy fields across the EU.

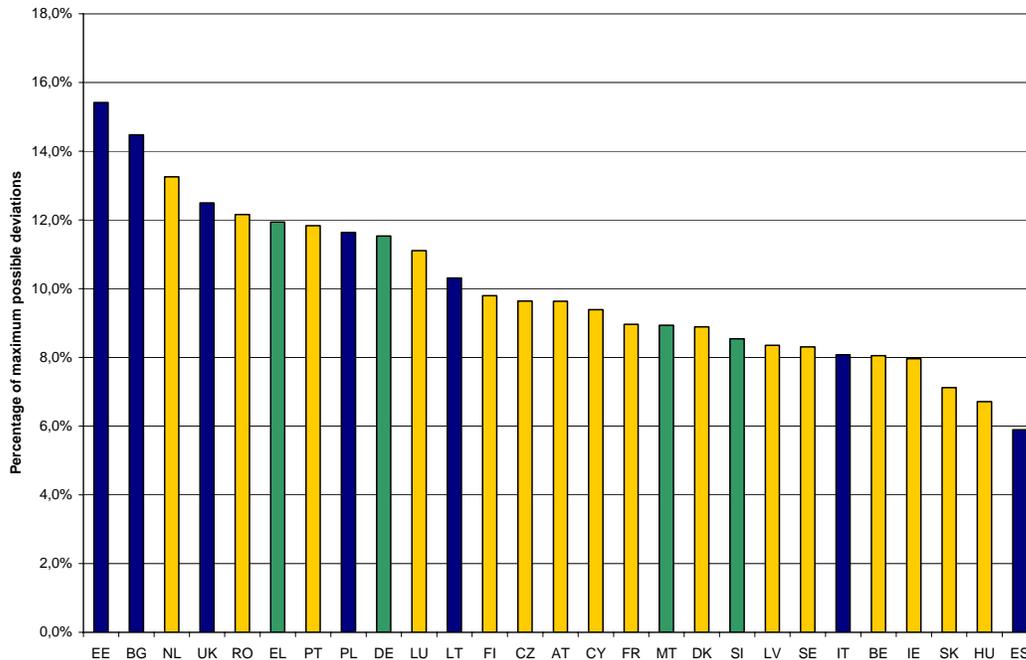
One approach to measure the prioritisation of MS is the computation of the square root of the sum of the weighted squared differences between the country’s shares and the EU-27 shares. The degree of prioritisation for each MS can be computed as

$$Deprio = \sqrt{\sum_i \frac{(x_i - x_{i,EU})^2}{x_{i,EU}}}$$

with  $x_i$  as the share of measures carried out in policy field  $i$  in that MS and  $x_{i,EU}$  as the share of measures carried out in the broad policy field  $i$  in the entire EU-27. We relate the value obtained to the maximum possible deviation from the EU profile. The higher the

percentage the more a MS prioritized reforms differently from the observed EU reform profile. The results are presented in Graph 12 below.<sup>10</sup>

**Graph 12: Deviations of national reform profiles from the EU benchmark**



Graph 12 shows that the range of deviations from the EU-27 reform profile lays between around 6,0% and 15,0%. Estonia is the Member State that deviates most from the observed reform profile of the EU. Over the whole period Spain is the most representative Member States for the entire EU in terms of its reform profile. We cannot identify a specific group of MS (e.g. new MS) that deviates systematically from the EU profile. Further research might apply the approach presented here to build annual profiles and test for explanatory factors of the deviations (e.g. elections in one year, membership, etc.).

## 4. Characterisation of microeconomic reforms

Little is known about the characteristics of microeconomic reforms. MICREF, as a tool to classify and describe reforms in terms of a set of features, is a rich source of information on this issue.

In this section we therefore study the characteristics of the microeconomic reforms using some descriptive features for which the MICREF database provides fields to store

<sup>10</sup> The colours of the bars used in Graph 12 are a reminder of the policy domains which were prioritised by each Member State. ■ MS that prioritise reforms in “Market Integration”, ■ MS that prioritise reforms in “Competition Policy”, ■ MS that prioritise reforms in “Sector specific regulation”, ■ MS that prioritise reforms in “Start-up conditions”, ■ MS that prioritise reforms in “Improving the business environment”, ■ MS that prioritise reforms in “R&D and Innovation”, ■ MS that priorities reforms in “Education”.

relevant data. Comparisons on a country level are not made, since the completion of the data on descriptive features varies widely across MS.

We perform the analysis at the level of the 7 broad policy fields. This is because the data available at this level provides a good compromise between completeness and detail. Another reason to carry out the analysis on this level is that the broad policy fields are used to classify the reform measures contained in the reporting grids enclosed to the implementation reports of the National Reform Programmes in the context of the Lisbon Assessment Framework (LAF).

The low rate of data completeness is the main limitation to the analysis of the reform characteristics on a more disaggregated level (for instance across reform areas) or across Member States. Table 2 gives an overview of the information available on the descriptive features considered for the analysis of the different reform characteristics.

**Table 2: Completion of descriptive features relevant for the analysis**

Descriptive feature	Number of filled out cells	Completion rate
Reference*	989	100,0%
Date of adoption (Day)	448	45,3%
Date of adoption (Month)	611	61,8%
Date of adoption (Year)*	989	100,0%
Date of implementation (Day)	310	31,3%
Date of implementation (Month)	395	39,9%
Date of implementation (Year)	553	55,9%
Budgetary impact on Revenues	220	22,2%
Absolute Amount	27	2,7%
Starting year	55	5,6%
End year	29	2,9%
Budgetary impact on Expenditures	365	36,9%
Absolute Amount	194	19,6%
Starting year	206	20,8%
End year	146	14,8%
Involvement of sectoral federations	213	21,5%
Involvement of Trade Unions	180	18,2%
Involvement of Consumers	171	17,3%
Involvement of Other Stakeholders	130	13,1%
Is the reform part of a reform package?	315	31,9%
Number of policy domains affected by the reform package	125	12,6%
Main policy domain	235	23,8%
Are monitoring procedures put in place?	265	26,8%
Monitoring body?	217	21,9%
Monitoring frequency?	159	16,1%
Are evaluation procedures put in place?	152	15,4%
Evaluating body?	84	8,5%
Channel: Entry/Exit**	291	--
Channel: Direct costs of doing business**	203	--
Channel: Increase of public/private R&D**	218	--
Channel: Innovation capacity**	306	--
Channel: Mark-ups**	144	--
Channel: Productivity**	144	--
Economic Importance of the sector	164	16,6%

As we see, the information available on descriptive features presents many gaps. Whereas data concerning the mandatory descriptive features (reference and year of adoption, indicated by \*) is always provided, the rate of completion among the other descriptive features exceeds 30% only in a few cases. Information on the “dates of adoption” and the “dates of implementation” is relatively complete. The same is true for the descriptive features addressing the “budgetary impact on expenditures” and the affiliation of a reform measure to a “reform package”. The completion rate is not relevant for the reform channel (indicated by \*\*), since the channel is selected by the Commission.

The rate of completion of the descriptive features is not equally distributed across Member States. In fact, whereas some MS have provided information on almost all

descriptive features there is also a number of MS that have not provided any information on the attributes of the reforms, neither in the Implementation Report, nor during the verification phase. Since MS are not obliged to complete most of the descriptive features, the variation in the rate of completion is not surprising. However, case studies for countries with a high rate of completion are in principle possible. Among the reform characteristics, we focus on 7 descriptive features, which are the legal reference of a reform, the speed of implementation, the budgetary impact, the involvement of stakeholder, the overall policy context, the governance, and the main microeconomic channel targeted.

#### 4.1 What are the legal acts establishing microeconomic reforms?

One of the standard questions used to gather information about policy measures within MICREF is “through which legal acts a microeconomic reform was enacted?”. For a measure to be included, it is mandatory to provide its legal reference. As the legal reference is always known, we are not concerned here with the problem of limited coverage discussed at the beginning of this section. The legal reference can take four shapes which are “budget law”, “decree”, “law” and “other”.

**Table 3: Legal reference by policy field**

		Budget law	Decree	Law	Other	Total
Market integration	Reforms	1	2	37	26	66
	%	1,5%	3,0%	56,1%	39,4%	100,0%
Competition policy	Reforms	0	3	24	15	42
	%	0,0%	7,1%	57,1%	35,7%	100,0%
Sector specific regulation	Reforms	0	17	88	67	172
	%	0,0%	9,9%	51,2%	39,0%	100,0%
Start-up conditions	Reforms	2	7	22	59	90
	%	2,2%	7,8%	24,4%	65,6%	100,0%
Improving the (small) business environment	Reforms	6	9	60	149	224
	%	2,7%	4,0%	26,8%	66,5%	100,0%
R&D and Innovation	Reforms	13	13	50	204	280
	%	4,6%	4,6%	17,9%	72,9%	100,0%
Education	Reforms	3	16	26	70	115
	%	2,6%	13,9%	22,6%	60,9%	100,0%
Total	Reforms	25	67	307	590	989
	%	2,5%	6,8%	31,0%	59,7%	100,0%

We observe (Table 3) that most reforms were not adopted through laws, but through an “other” legal act. However, we can identify three policy fields for which the most common legal reference is a law: “market integration”, “competition policy” and “sector-specific regulation”. The reforms adopted in these fields are expected to affect the “open and competitive markets” environment. The large share of “other legal references” might be explained by “others” being the default option, when no information could be found on the legal act establishing the reform.

## 4.2 How fast are reforms implemented?

In 2006, the European Commission urged Member States “to move up a gear” regarding the implementation of structural reforms (see the January 2006 Annual Progress Report on Growth and Jobs), since by that time their achievements were lagging behind the objectives set at the European Council 2000 in Lisbon. Using the MICREF database we cannot investigate the progress achieved towards these targets but we can measure the time elapsed between the formal step of adoption and the date at which the measure is set up or in force. The descriptive features in MICREF provide for the reforms’ adoption by the last responsible body in the legislative process and the effective implementation of a measure. If we take the difference of the full dates “date of adoption” and “date of implementation” we can check for differences in the speed of implementation across the broad policy fields. Table 2 showed that we have a relatively high rate of data completion, but to calculate the number of days elapsed, we require the exact match of the full dates of adoption and implementation. This is the case for 220 out of the 989 measures stored. Out of these, there are four measures for which the application of the above mentioned formula leads to a negative number of days. These cases were excluded, since the reform measure went into force retroactively. As a result 216 measures remain to compute the number of days elapsed, leading to the results showed in Table 4.

**Table 4: Speed of implementation**

	Days	Reforms	Standard Deviation
Market integration	47	23	40
Competition policy	50	17	86
Sector specific regulation	121	52	191
Start-up conditions	141	21	200
Improving the (small) business environment	112	47	148
R&D and Innovation	115	43	185
Education	123	13	152
Total	106	216	163

The number of days between both dates provides quite an intuitive indication for the average speed of implementation within the 7 policy fields. Compared with the average across all policy fields of 106 days elapsed between the reforms’ adoption and its implementation we find for the measures undertaken in “market integration” and “competition policy” an average speed well below this figure. For reforms in the fields “sector-specific regulation”, “improving the business environment”, “R&D and innovation” and “education” the speed of implementation lays slightly above the average. For reforms in “start-up conditions” the implementation takes longest, 141 days is the mean for the reforms carried out in this policy field.

### 4.3 What is the budgetary impact of reforms?

One characteristic of interest is the budgetary impact of microeconomic reforms. Not all reforms are limited to changes of the legislative framework, some set fiscal incentives to encourage behaviour of market participants in line with the objectives of the reform. This has budgetary consequences, which can be positive or negative, or unknown. As regards the potential direct budgetary impact of a reform the MICREF database focuses on two aspects - revenues and expenditures.

An *impact on revenues* occurs in cases of privatizations or a tax reform. Overall, 220 specifications of reform measures in terms of its budgetary impact on revenues are made. This corresponds to a response rate of 22,2%. The distribution of replies can be taken from Table 5.

**Table 5: Budgetary impact on revenues by policy field**

		Positive impact	No impact	Negative impact	Unknown	Total
Market integration	Reforms	3	9	0	5	17
	%	17,6%	52,9%	0,0%	29,4%	100,0%
Competition policy	Reforms	2	8	2	2	14
	%	14,3%	57,1%	14,3%	14,3%	100,0%
Sector specific regulation	Reforms	10	18	0	11	39
	%	25,6%	46,2%	0,0%	28,2%	100,0%
Start-up conditions	Reforms	2	13	1	3	19
	%	10,5%	68,4%	5,3%	15,8%	100,0%
Improving the (small) business environment	Reforms	5	31	15	8	59
	%	8,5%	52,5%	25,4%	13,6%	100,0%
R&D and Innovation	Reforms	1	28	18	13	60
	%	1,7%	46,7%	30,0%	21,7%	100,0%
Education	Reforms	1	7	0	4	12
	%	8,3%	58,3%	0,0%	33,3%	100,0%
Total	Reforms	24	114	36	46	220
	%	10,9%	51,8%	16,4%	20,9%	100,0%

We see that a majority of the reforms has no impact on revenues (51,8%), or its impact is unknown (20,9%). All fiscal measures (e.g. those providing tax incentives for innovative activities) were registered as reforms affecting revenues. Moreover, the data suggest that a positive impact on revenues exists for 10 measures in the policy field “sector-specific regulation” under which field inter alia privatizations of previously state-owned companies are recorded. The fact that for quite a substantial number of reforms the impact is unknown can be interpreted as it is indeed not easy to specify the development of revenues related to the set up of a measure.

The rate of completion is in general higher for the specification of the *budgetary impacts on expenditures* (36,9% compared to 22,2%). Expenditures can be quantified more easily, whereas the effect of a measure on revenues can often only be estimated.

**Table 6: Budgetary impact on expenditures by policy field**

		Positive impact	No impact	Negative impact	Unknown	Total
Market integration	Reforms %	1 5,3%	9 47,4%	2 10,5%	7 36,8%	19 100,0%
Competition policy	Reforms %	0 0,0%	8 72,7%	1 9,1%	2 18,2%	11 100,0%
Sector specific regulation	Reforms %	3 8,1%	18 48,6%	5 13,5%	11 29,7%	37 100,0%
Start-up conditions	Reforms %	0 0,0%	4 9,5%	35 83,3%	3 7,1%	42 100,0%
Improving the (small) business environment	Reforms %	6 8,1%	17 23,0%	42 56,8%	9 12,2%	74 100,0%
R&D and Innovation	Reforms %	4 3,0%	10 7,6%	112 84,8%	6 4,5%	132 100,0%
Education	Reforms %	1 2,0%	2 4,0%	46 92,0%	1 2,0%	50 100,0%
Total	Reforms %	15 4,1%	68 18,6%	243 66,6%	39 10,7%	365 100,0%

As shown in Table 6, the distribution of specifications differs significantly from the one for the budgetary impact on revenues. Two thirds of the specifications made provide for a negative impact of a microeconomic reform on expenditures. For all policy fields the number of specifications of a negative budgetary impact exceeds the ones of a positive budgetary impact. This is particularly the case in the policy fields “R&D and innovation”, “start-up conditions”, “improving the business environment” and “education” where the large majority of measures are funding programmes, in which the Member State appears as consumer and/or initial investor.

#### **4.4 Which stakeholders are involved in the reform process?**

One of the main obstacles for reforms from a political-economy perspective is a lack of political support from the groups of society concerned. Microeconomic reforms are often the outcome of discussions with stakeholders that might be concerned by the reform measure, or need to be consulted by law. The involvement of stakeholders in the reform process can have two opposite effects on the design of the measure. The policy can be improved benefitting from the input of the involved stakeholders, but also be reduced in its impact because of the necessity to compromise with the stakeholders that had benefitted from the pre-reform policy regime. The descriptive feature 7 allows us to investigate the stakeholders involved in the setting up of a reform measure. Three stakeholders of particular interest (sectoral federations, trade unions and consumers) are pre-listed. Moreover there is the possibility to add the involvement of an alternative stakeholder, which needs to be identified (based on the information provided by the Member States). The involvement of a stakeholder can be classified by the options “no involvement”, “passive involvement”, “open consultation” and “active involvement”.

The analysis takes into account 237 reform measures for which at least one stakeholder has been characterised in terms of its involvement in the reform process. Additionally, the alternative options “not specified” (i.e. not mentioned) and “rate of specification” respectively have been introduced as a proxy to investigate the relevance of a particular

stakeholder for the different policy fields. The interpretation would be that if for a high share of measures within a policy field a particular stakeholder has not been specified, this may provide evidence for the irrelevance of the stakeholder in the decision-making process in that particular area.

**Table 7: Involvement of Sectoral federations**

		Active involvement	Open consultation	Passive involvement	No Involvement	Not specified	Rate of specification	Total
Market integration	Reforms	4	5	1	6	2	16	18
	%	22,2%	27,8%	5,6%	33,3%	11,1%	88,9%	100,0%
Competition policy	Reforms	3	4	0	4	1	11	12
	%	25,0%	33,3%	0,0%	33,3%	8,3%	91,7%	100,0%
Sector specific regulation	Reforms	17	11	0	9	3	37	40
	%	42,5%	27,5%	0,0%	22,5%	7,5%	92,5%	100,0%
Start-up conditions	Reforms	6	5	5	0	2	16	18
	%	33,3%	27,8%	27,8%	0,0%	11,1%	88,9%	100,0%
Improving the (small) business environment	Reforms	24	8	9	11	3	52	55
	%	43,6%	14,5%	16,4%	20,0%	5,5%	94,5%	100,0%
R&D and Innovation	Reforms	31	13	11	6	9	61	70
	%	44,3%	18,6%	15,7%	8,6%	12,9%	87,1%	100,0%
Education	Reforms	10	1	1	8	4	20	24
	%	41,7%	4,2%	4,2%	33,3%	16,7%	83,3%	100,0%
Total	Reforms	95	47	27	44	24	213	237
	%	40,1%	19,8%	11,4%	18,6%	10,1%	89,9%	100,0%

Sectoral federations (Table 7) are an important stakeholder in the set up and establishment of structural reforms. This is the group that has been specified more often (i.e. highest rate of specification, 89,9%). Moreover, the data suggests that with a share of only 18,6% of “no involvement”, sectoral federations are the stakeholders that have been more implicated in reform process. Whenever sectoral federations were involved, they played an active role (active involvement) in the setting up of the measure in most policy fields, with the exception of reforms in the fields “market integration” and “competition policy”, in whose context their involvement was restricted to consultations.

**Table 8: Involvement of Trade Unions**

		Active involvement	Open consultation	Passive involvement	No Involvement	Not specified	Rate of specification	Total
Market integration	Reforms	1	6	0	8	3	15	18
	%	5,6%	33,3%	0,0%	44,4%	16,7%	83,3%	100,0%
Competition policy	Reforms	1	3	0	3	5	7	12
	%	8,3%	25,0%	0,0%	25,0%	41,7%	58,3%	100,0%
Sector specific regulation	Reforms	10	7	1	14	8	32	40
	%	25,0%	17,5%	2,5%	35,0%	20,0%	80,0%	100,0%
Start-up conditions	Reforms	4	3	0	10	1	17	18
	%	22,2%	16,7%	0,0%	55,6%	5,6%	94,4%	100,0%
Improving the (small) business environment	Reforms	11	8	4	22	10	45	55
	%	20,0%	14,5%	7,3%	40,0%	18,2%	81,8%	100,0%
R&D and Innovation	Reforms	11	5	6	25	23	47	70
	%	15,7%	7,1%	8,6%	35,7%	32,9%	67,1%	100,0%
Education	Reforms	5	3	1	8	7	17	24
	%	20,8%	12,5%	4,2%	33,3%	29,2%	70,8%	100,0%
Total	Reforms	43	35	12	90	57	180	237
	%	18,1%	14,8%	5,1%	38,0%	24,1%	75,9%	100,0%

With a specification rate of 75,9%, the relevance of trade unions (Table 8) remains well below the one of sectoral federations. The proportion of reforms for which the participation of this stakeholder was not even considered (i.e. the share of no

specifications) ranges from 5,6% in the field “start-up conditions” to 41,7% in “competition policy”. Trade unions were “not involved” in 38% of the reforms in which their participation was considered. Across the policy fields, trade unions were actively involved only in 18,1% of the reform measures pondered with stakeholders, (one out of four concerning “sector-specific regulation” but just 5% of those aiming at “market integration”). Even so, active participation of trade unions was more common (prime option in 5 out of the 7 policy fields) than mere consultation. However, considering that trade unions were somehow implicated only in about 40% of the reforms, we can conclude that they play a rather minor role in policy making in the microeconomic area.

**Table 9: Involvement of Consumers**

		Active involvement	Open consultation	Passive involvement	No Involvement	Not specified	Rate of specification	Total
Market integration	Reforms	1	4	0	10	3	15	18
	%	5,6%	22,2%	0,0%	55,6%	16,7%	83,3%	100,0%
Competition policy	Reforms	0	3	0	4	5	7	12
	%	0,0%	25,0%	0,0%	33,3%	41,7%	58,3%	100,0%
Sector specific regulation	Reforms	1	9	5	17	8	32	40
	%	2,5%	22,5%	12,5%	42,5%	20,0%	80,0%	100,0%
Start-up conditions	Reforms	0	2	2	11	3	15	18
	%	0,0%	11,1%	11,1%	61,1%	16,7%	83,3%	100,0%
Improving the (small) business environment	Reforms	9	9	2	22	13	42	55
	%	16,4%	16,4%	3,6%	40,0%	23,6%	76,4%	100,0%
R&D and Innovation	Reforms	7	7	4	27	25	45	70
	%	10,0%	10,0%	5,7%	38,6%	35,7%	64,3%	100,0%
Education	Reforms	2	2	0	11	9	15	24
	%	8,3%	8,3%	0,0%	45,8%	37,5%	62,5%	100,0%
Total	Reforms	20	36	13	102	66	171	237
	%	8,4%	15,2%	5,5%	43,0%	27,8%	72,2%	100,0%

Consumers are the third pre-listed stakeholder. We find a specification rate of 72,8%, slightly lower than the corresponding rate for trade unions. Furthermore we note a high rate of “no involvement” (43,0%). This gives evidence that consumers are even less engaged in the reform processes than trade unions. Table 9 also shows that the type of involvement differs from what we have seen before. If involved, consumers were mainly consulted, playing on average a less active role in the designing process of microeconomic reforms.

**Table 10: Involvement of other stakeholders**

		Active involvement	Open consultation	Passive involvement	No Involvement	Not specified	Rate of specification	Total
Market integration	Reforms	3	3	0	4	8	10	18
	%	16,7%	16,7%	0,0%	22,2%	44,4%	55,6%	100,0%
Competition policy	Reforms	2	1	1	0	8	4	12
	%	16,7%	8,3%	8,3%	0,0%	66,7%	33,3%	100,0%
Sector specific regulation	Reforms	3	3	1	10	23	17	40
	%	7,5%	7,5%	2,5%	25,0%	57,5%	42,5%	100,0%
Start-up conditions	Reforms	9	1	1	2	5	13	18
	%	50,0%	5,6%	5,6%	11,1%	27,8%	72,2%	100,0%
Improving the (small) business environment	Reforms	19	5	1	9	21	34	55
	%	34,5%	9,1%	1,8%	16,4%	38,2%	61,8%	100,0%
R&D and Innovation	Reforms	27	5	1	6	31	39	70
	%	38,6%	7,1%	1,4%	8,6%	44,3%	55,7%	100,0%
Education	Reforms	9	1	0	3	11	13	24
	%	37,5%	4,2%	0,0%	12,5%	45,8%	54,2%	100,0%
Total	Reforms	72	19	5	34	107	130	237
	%	30,4%	8,0%	2,1%	14,3%	45,1%	54,9%	100,0%

We should clarify at the outset that the specification of an alternative stakeholder is not clearly explained in the user guide. It leaves open the possibility of proposing any potential stakeholder and does not give instructions about which stakeholder to provide if there were more than one.

In their NRP, Member States rarely contemplate the intervention of stakeholders other than the three main social actors discussed above. As a result, this heterogeneous group has the lowest specification rate (54,9%). However, “other stakeholders” seem to be much more implicated than the other groups: their rate of “no involvement” (14,3%) is the lowest for all stakeholders. One caveat should be mentioned, though: with the exception of the policy field “start-up conditions”, the share of other stakeholders that were not involved or not specified is well above 50%. In the policy fields “start-up conditions”, “improving the business environment”, “R&D and innovation” and “education” the share of actively involved other stakeholders is above the average value for all policy fields (30,4%). For the policy fields of the “open and competitive markets” policy domain the active involvement of the alternative stakeholder is relatively lower in comparison with other policy domains. If involved, “alternative” stakeholders would play a rather important role in the set up of a reform measure (through active involvement or open consultation), in particular in the context of reforms affecting “start-up conditions”.

#### **4.5 What is the context of the reform measure – stand alone, or reform package?**

A further important characteristic of structural reform measures relates to the general context in which a given measure has been adopted. Microeconomic reforms can be established in the context of other measures targeting the same or different areas of reform or can be set up independently. There are two considerations why this issue is of interest. First of all, product, labour and capital markets are highly interdependent. Secondly, a reform creating potential losers in one area could have a higher level of political support if the measure is part of a reform package which also contains compensatory elements in another area. One of the descriptive features of the MICREF database refers to the context of a reform. We want to investigate whether we can find differences across the policy fields.

**Table 11: Is the measure part of a reform package?**

		Yes	No, pilot measure	No, single reform	Total
Market integration	Reforms	4	1	10	15
	%	26,7%	6,7%	66,7%	100,0%
Competition policy	Reforms	4	1	7	12
	%	33,3%	8,3%	58,3%	100,0%
Sector specific regulation	Reforms	42	0	12	54
	%	77,8%	0,0%	22,2%	100,0%
Start-up conditions	Reforms	25	3	6	34
	%	73,5%	8,8%	17,6%	100,0%
Improving the (small) business environment	Reforms	67	2	13	82
	%	81,7%	2,4%	15,9%	100,0%
R&D and Innovation	Reforms	67	4	17	88
	%	76,1%	4,5%	19,3%	100,0%
Education	Reforms	24	0	6	30
	%	80,0%	0,0%	20,0%	100,0%
Total	Reforms	233	11	71	315
	%	74,0%	3,5%	22,5%	100,0%

Before investigating the context of the reform we need to emphasise the difficulty to determine whether a measure is part of a reform package based on our information sources. Moreover, we need to consider the low rate of data completion (response rate 31,9%). The data show that the vast majority of measures have been specified as being part of a larger reform context (74% of the measures were part of a reform package). This evidence however is not consistent across all policy areas as it can be observed in Table 11. “Market integration” and “competition policy” are the policy fields in which we can observe a higher share of single reforms. For all other policy fields, the measures being part of a package prevail. Eleven measures were specified as to be pilot measures. The current set up of the descriptive feature (options “yes”, “no, pilot measure”, “no, single reform”) does not take into account that a reform measure can be a pilot *within* a reform package. A slight revision in the user guide could address this issue. However, even if all pilot measures were “single reforms” the evidence would not change.

**Table 12: How many policy domains are affected by the reform package?**

		0	1	2	3	4	5	Total
Market integration	Reforms	0	0	1	0	0	1	2
	%	0,0%	0,0%	50,0%	0,0%	0,0%	50,0%	100,0%
Competition policy	Reforms	0	1	1	0	0	0	2
	%	0,0%	50,0%	50,0%	0,0%	0,0%	0,0%	100,0%
Sector specific regulation	Reforms	0	7	4	1	0	0	12
	%	0,0%	58,3%	33,3%	8,3%	0,0%	0,0%	100,0%
Start-up conditions	Reforms	0	7	4	0	5	1	17
	%	0,0%	41,2%	23,5%	0,0%	29,4%	5,9%	100,0%
Improving the (small) business environment	Reforms	0	20	5	3	6	3	37
	%	0,0%	54,1%	13,5%	8,1%	16,2%	8,1%	100,0%
R&D and Innovation	Reforms	1	16	10	4	7	4	42
	%	2,4%	38,1%	23,8%	9,5%	16,7%	9,5%	100,0%
Education	Reforms	0	11	2	0	0	0	13
	%	0,0%	84,6%	15,4%	0,0%	0,0%	0,0%	100,0%
Total	Reforms	1	62	27	8	18	9	125
	%	0,8%	49,6%	21,6%	6,4%	14,4%	7,2%	100,0%

If a measure forms part of a reform package we can investigate how broad the reform package was. We have for 125 microeconomic reforms information on this descriptive

feature. A maximum number of 5 policy domains can be affected by the reform package as specified in the user guide. The five policy domains are: 1) open and competitive markets, 2) business environment and entrepreneurship, 3) knowledge-based economy, 4) capital markets, and 5) labour markets. These options reflect potential interdependences between different policy domains in an economy. Table 12 shows that most reform packages were addressing one (49,6%) or two (21,6%) of the policy domains. Nine measures were part of a reform package that encompasses all five policy domains, of which four were measures adopted in the field “R&D and innovation”.

**Table 13: Which is the main policy domain affected by the reform package?**

		Capital markets	Labour markets	Product markets - open and competitive markets	Product markets - business environment and entrepreneurship	Knowledge based economy	Total
Market integration	Reforms %	0 0,0%	0 0,0%	3 75,0%	0 0,0%	1 25,0%	4 100,0%
Competition policy	Reforms %	1 33,3%	0 0,0%	2 66,7%	0 0,0%	0 0,0%	3 100,0%
Sector specific regulation	Reforms %	0 0,0%	0 0,0%	46 100,0%	0 0,0%	0 0,0%	46 100,0%
Start-up conditions	Reforms %	1 3,7%	1 3,7%	0 0,0%	21 77,8%	4 14,8%	27 100,0%
Improving the (small) business environment	Reforms %	0 0,0%	0 0,0%	0 0,0%	55 84,6%	10 15,4%	65 100,0%
R&D and Innovation	Reforms %	1 1,5%	2 3,0%	0 0,0%	11 16,4%	53 79,1%	67 100,0%
Education	Reforms %	0 0,0%	3 13,0%	1 4,3%	0 0,0%	19 82,6%	23 100,0%
Total	Reforms %	3 1,3%	6 2,6%	52 22,1%	87 37,0%	87 37,0%	235 100,0%

In relation to the main policy domain affected by a given reform package, we can base our analysis on a broader dataset. Compared to the 125 measures for which the *number* of policy domains of the reform package has been specified, we have 235 measures for which we know *which* domain was primarily affected. We can observe that if a reform measure has been part of a reform package, the latter was very often affecting the same policy domain as the measure itself. For instance, all measures reforming “sector-specific regulation(s)” were included in a reform package which affected the policy domain “open and competitive markets”. Moreover, we find that the measures stored in the MICREF database are rarely part of a reform package that primarily targets capital or labour markets, i.e. focus on areas that are not under the scope of MICREF. In addition, reform packages in the policy domain “knowledge-based economy” include measures from nearly all policy fields.

#### **4.6 How does the governance of reforms look like (Monitoring and Evaluation)?**

**Monitoring** keeps track of the implementation of a reform. It is an important feature of the reform governance since an effective monitoring ensures the successful implementation of a reform measure, signalling potential problems in time and urging for

intervention. The question whether monitoring procedures exist and how they look like is therefore to be investigated.

**Table 14: Are monitoring procedures put in place?**

		Yes	No	Total
Market integration	Reforms	15	4	19
	%	78,9%	21,1%	100,0%
Competition policy	Reforms	12	3	15
	%	80,0%	20,0%	100,0%
Sector specific regulation	Reforms	39	8	47
	%	83,0%	17,0%	100,0%
Start-up conditions	Reforms	25	0	25
	%	100,0%	0,0%	100,0%
Improving the (small) business environment	Reforms	50	13	63
	%	79,4%	20,6%	100,0%
R&D and Innovation	Reforms	67	8	75
	%	89,3%	10,7%	100,0%
Education	Reforms	19	2	21
	%	90,5%	9,5%	100,0%
Total	Reforms	227	38	265
	%	85,7%	14,3%	100,0%

Regarding the existence of monitoring procedures Table 14 contains the 265 answers provided by the MS across all broad policy fields. We see that monitoring procedures are put in place for the large majority of measures within each policy field.

**Table 15: Monitoring body**

		Independent body	Other, such as e.g. ministry or governmental working group	Total
Market integration	Reforms	5	10	15
	%	33,3%	66,7%	100,0%
Competition policy	Reforms	5	7	12
	%	41,7%	58,3%	100,0%
Sector specific regulation	Reforms	18	21	39
	%	46,2%	53,8%	100,0%
Start-up conditions	Reforms	6	18	24
	%	25,0%	75,0%	100,0%
Improving the (small) business environment	Reforms	4	45	49
	%	8,2%	91,8%	100,0%
R&D and Innovation	Reforms	11	51	62
	%	17,7%	82,3%	100,0%
Education	Reforms	2	14	16
	%	12,5%	87,5%	100,0%
Total	Reforms	51	166	217
	%	23,5%	76,5%	100,0%

For 217 reform measures the monitoring body has been characterised. Monitoring can be undertaken by a body that is independent of the decision making procedures or by an institution that is to some extent involved in the decision-making, preparation or implementation of the measure. Table 15 shows that monitoring is executed mainly by bodies that are dependent such as ministry or governmental working groups. However, we can see also that a relatively large share of independent bodies is monitoring the reforms in the policy fields “competition policy” and “sector-specific regulation” (independent institutions such as antitrust offices or market regulators).

**Table 16: Monitoring frequency**

		Quarterly	Yearly	Biannually	Irregularly	Total
Market integration	Reforms %	5 41,7%	1 8,3%	0 0,0%	6 50,0%	12 100,0%
Competition policy	Reforms %	1 11,1%	6 66,7%	0 0,0%	2 22,2%	9 100,0%
Sector specific regulation	Reforms %	1 3,8%	15 57,7%	3 11,5%	7 26,9%	26 100,0%
Start-up conditions	Reforms %	3 16,7%	6 33,3%	2 11,1%	7 38,9%	18 100,0%
Improving the (small) business environment	Reforms %	5 14,3%	14 40,0%	3 8,6%	13 37,1%	35 100,0%
R&D and Innovation	Reforms %	6 12,5%	27 56,3%	6 12,5%	9 18,8%	48 100,0%
Education	Reforms %	1 9,1%	8 72,7%	1 9,1%	1 9,1%	11 100,0%
Total	Reforms %	22 13,8%	77 48,4%	15 9,4%	45 28,3%	159 100,0%

Referring to the intervals in which monitoring is carried out (Table 16), we find that the tracking of the implementation of the reforms is carried out on an annual basis for most policy fields (“competition policy”, “sector-specific regulation”, “improving the business environment”, “R&D and innovation”, “education”). For measures under “market integration” and “start-up conditions” an irregular basis is the most frequent solution.

**Evaluation procedures** are the second important feature of the governance of reforms. In contrast to monitoring, the purpose of evaluation is to give a true assessment of the effectiveness and efficiency of a reform measure in terms of its ex-ante set objectives. The conclusions of the evaluation are important since they indicate whether a measure has to be refined, continued or even discontinued.

**Table 17: Are evaluation procedures put in place?**

		Yes	No	Total
Market integration	Reforms %	6 46,2%	7 53,8%	13 100,0%
Competition policy	Reforms %	5 62,5%	3 37,5%	8 100,0%
Sector specific regulation	Reforms %	11 40,7%	16 59,3%	27 100,0%
Start-up conditions	Reforms %	10 66,7%	5 33,3%	15 100,0%
Improving the (small) business environment	Reforms %	22 62,9%	13 37,1%	35 100,0%
R&D and Innovation	Reforms %	32 72,7%	12 27,3%	44 100,0%
Education	Reforms %	7 70,0%	3 30,0%	10 100,0%
Total	Reforms %	93 61,2%	59 38,8%	152 100,0%

Table 17 shows that for the majority of the 152 measures for which the corresponding information is available, evaluation procedures exist. However, they are less common than monitoring procedures: just 61,2% of the reforms were planned to be evaluated while 85,7% of the reforms had monitoring arrangements put in place. The percentage of measures without evaluation procedures is particularly high in the policy fields “market integration” and “sector-specific regulation”.

**Table 18: Evaluating body**

		Independent body	Other, such as e.g. ministry or governmental working group	Total
Market integration	Reforms %	0 0,0%	6 100,0%	6 100,0%
Competition policy	Reforms %	0 0,0%	5 100,0%	5 100,0%
Sector specific regulation	Reforms %	7 63,6%	4 36,4%	11 100,0%
Start-up conditions	Reforms %	5 55,6%	4 44,4%	9 100,0%
Improving the (small) business environment	Reforms %	3 13,6%	19 86,4%	22 100,0%
R&D and Innovation	Reforms %	10 40,0%	15 60,0%	25 100,0%
Education	Reforms %	1 16,7%	5 83,3%	6 100,0%
Total	Reforms %	26 31,0%	58 69,0%	84 100,0%

If evaluation procedures are put in place the question of the independence of the evaluating body is also relevant. Table 18 gives a picture that differs from what we have seen for monitoring procedures. Whereas for a majority of reforms within all policy fields the monitoring body is an institution involved in the decision-making process, the evaluation of measures concerning “sector-specific regulation” and “start-up conditions” is carried out mainly by independent bodies. For the other policy fields a dependent body remains dominant. However, we need to keep in mind that only for a fraction of measures in the dataset this characterisation has been made, so that the results presented can be subject to changes in the further development of the dataset.

#### **4.7 Which microeconomic channel is to be addressed by the reform?**

Microeconomic reforms can have an impact through different microeconomic channels on the economy. The descriptive feature 11 was set to specify the main economic channel through which the microeconomic reform measure should affect the development of jobs and growth. In order to address this question we are not conditioned by the low data density. The specification is made if the general description of a reform measure gives sufficiently detailed information to determine the channel. In the MICREF database six channels have been pre-defined (entry/exit, direct costs of doing business, increase of public/private R&D, innovation performance, mark-ups and productivity). Table 19 provides the share of a specific channel ticked as a percentage of the total number of reforms stored under a specific policy field. This helps us to investigate through which channels a reform measure in a given policy field may affect the economy. We need to consider that for each measure more than one channel could have been ticked if the reform unfolds its impact via several channels.

**Table 19: Microeconomic channels affected by policy fields**

	Entry/Exit in market	Direct cost of doing business	Increase of public/private R&D	Innovation Performance	Mark-ups	Productivity
Market integration	36,4%	28,8%	3,0%	7,6%	21,2%	12,1%
Competition policy	35,7%	14,3%	2,4%	2,4%	50,0%	14,3%
Sector specific regulation	69,2%	7,0%	0,6%	1,2%	59,3%	14,5%
Start-up conditions	71,1%	44,4%	13,3%	28,9%	0,0%	8,9%
Improving the (small) business environment	20,1%	50,0%	4,0%	10,7%	1,3%	13,4%
R&D and Innovation	6,8%	5,0%	60,7%	78,6%	0,7%	13,6%
Education	4,3%	0,0%	20,0%	24,3%	1,7%	20,9%
Total	29,4%	20,5%	22,0%	30,9%	14,6%	14,1%

We can observe that the share of measures for which a specific channel is ticked varies largely across policy fields. For some types of measures it seems easier to specify the main channel affected than for others. In particular for measures in the policy fields “market integration” and “education” we have a lower share of measures focussing on a specific microeconomic channel. Measures primarily targeted on “market integration” act mostly via “entry/exit”, “Direct cost of doing business” and the “mark-ups” channel. Measures carried out under “competition policy” focus on “mark-ups” (50,0%) and “entry/exit”. Reforms addressing “sector-specific regulation” are strongly focussing on “entry/exit” (69,2%) and “mark-ups” (59,3%). Measures in the policy field “start-up conditions” strongly focus on “entry/exit” (71,1%) and “direct costs of doing business” (44,4%), as well as on “innovation performance” (28,9%). Reforms undertaken in the field “improving the business environment” target the “direct costs of doing business”. Measures to address “R&D and innovation” act mainly via the channels “increase public and private R&D” (60,7%) and “innovation performance” (78,6%). Measures in the field “education” are less focussed on a specific channel than reforms under the other policy fields. “innovation performance” and “productivity” are the channels through which those reforms take effect, even though for only around one-fourth of the reforms under “education” these channels have been ticked. The Annex provides graphs for each policy field showing the targeted channel versus the channels we can observe across all policy fields.

## 5. Conclusions

Little is known so far about the reform strategies of Member States within the area of microeconomic reforms. The report describes for the first time the reform activity and the characteristics of microeconomic reforms over the period 2004-2006 based on the MICREF database which is publicly available since July 2008.

As a first conclusion it is important to have in mind that the outcome of the analysis depends significantly on the comparability and the completeness of the data.

The analysis of the reform activity of the MS is conditioned by the fact that each MS may have a different understanding of a reform measure. Therefore, instead of comparing the

number of reforms across countries it seems more appropriate to focus on the analysis within a country over time. We therefore concentrated on relative concepts such as the “policy profiles” (share of total measures adopted by a country which are undertaken under a specific policy area) which can be interpreted as the revealed preferences of MS' reform priorities in the microeconomic area.

The analysis of the reform activity showed that:

1. MS set different reform priorities, but most MS address all policy fields.
2. Over the years 2004-2006, the priorities of the MS laid on enhancing and fostering innovation and improving the small business environment – these two fields account for 50% of the reforms.
3. Reform profiles are changing over time. The relative importance of the reforms under the “R&D and innovation” and the “education” policy fields increased during the period under study, whereas the importance of measures under “sector-specific regulation” declined.
4. Differences in reform profiles may be due to the level of integration within the EU (new MS, Euro area).

The analysis of the reform characteristics is in turn conditioned by the low data density of the descriptive features which do not allow for definite conclusions. Indeed, for the majority of measures only the information on the mandatory descriptive features is available. Along the non-mandatory features the rate of completion largely varies with the Member States. The analysis is made on the level of policy fields (not further disaggregated) and for the entire EU-27, not on Member State level.

Nonetheless, the outcome of the analysis of reform characteristics might be that depending on the policy field different reform characteristics are observable. Based on the data available we can conclude that:

1. There is a high variation in the speed of implementation with measures addressing “market integration” and “competition policy” being the ones implemented fastest.
2. For the majority of measures within each policy field there is no direct budgetary impact on revenues, whereas we observe no impact on budgetary expenditures only for measures in the domain “open and competitive markets” and more often than not a negative impact for the other policy fields.
3. Sectoral federations are the stakeholder most actively involved among the stakeholders.
4. For most measures where an answer was provided it was stated that they were part of a reform package (except for reforms under “market integration” and “competition policy”). Most reform packages are focussed on one or two policy fields, and cover the microeconomic area.
5. For most reform measures that were specified in terms of monitoring, monitoring procedures exist, which are typically executed by a dependent monitoring body.

6. Measures under the different policy fields show differences as regards the microeconomic channel. More than two-thirds of measures under “sector-specific regulation” and “start-up conditions” concentrate on “entry/exit”, around half of measures under the “start-up conditions” and “improving the business environment” focus on “direct costs for doing business”, 60,7% and 78,6% of the measures under “R&D and innovation” aim at the channels “increasing public/private R&D” and “innovation performance”. Furthermore, around half of reforms carried out under “competition policy” and “sector-specific regulation” address “mark-ups”.

The analysis presented should be considered as preliminary and the robustness of the results obtained needs to be proven once the database is further developed and populated. In particular, the robustness of the conclusion may become more stable once MICREF

1. will cover a longer time series;
2. the rate of completion along descriptive features increases;
3. data becomes less conditioned by a Member States bias.

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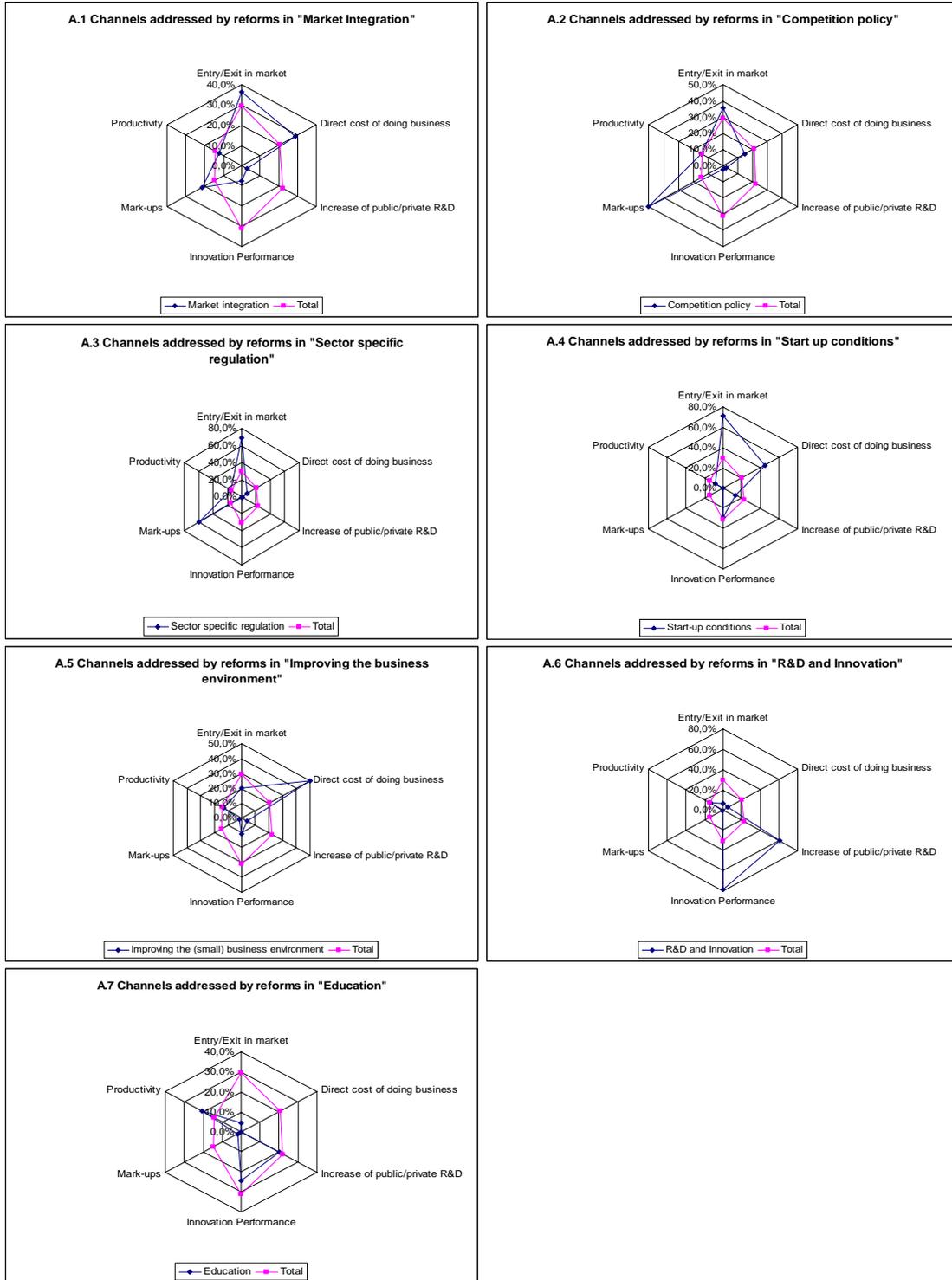
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# Annex

## Microeconomic channels addressed through microeconomic reforms by policy field



European Commission

**EUR 23575 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen**

Title: A descriptive analysis of Member States' microeconomic reforms based on the MICREF database and 2004-2006 data

Author(s): Dirk Zeitz, Elena Arjona Perez

Luxembourg: Office for Official Publications of the European Communities

2008

EUR – Scientific and Technical Research series – ISSN 1018-5593

**Abstract**

The aim of this report is to investigate two main aspects of EU Member States' (MS) microeconomic reforms: the policy priorities and the characteristics of the reforms. The analysis is based on the recently published database on microeconomic reforms MICREF. The data for the years 2004-2006 has been approved by MS and is publicly available since end July 2008 on the web pages of the Directorate General for Economic and Financial Affairs (DG ECFIN). The Joint Research Center (JRC) has been involved in the process of setting up and populating this database since April 2007.

The report highlights that the quality of the analysis of the reform processes based on the MICREF database depends on the comparability and completeness of the dataset. Regarding the reform activity, while we find that Member States set different priorities within the microeconomic area, most of them carried out reforms primarily in the policy field "R&D and innovation". A second observation is that the reform profiles are evolving over time: the share of reforms concentrated on "sector-specific regulation" declined, whereas the relevance of reforms addressing "improvement of the business environment" and "education" increased over the period 2004-2006. The low data density along the features describing the qualitative characteristics of reforms does not allow drawing definite conclusions. However, based on the data available there is evidence for differences in some reform characteristics at the level of policy fields. In particular, the analysis of stakeholder's involvement shows that sectoral federations are the stakeholders most actively involved in the reform process. Moreover, we find that reform measures seek to affect the economy through different microeconomic channels. Furthermore, most reform measures are not stand-alone initiatives but form part of reform packages.

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