

FINANCIAL AND RESOURCE MANAGEMENT FOR THE ACHIEVEMENT OF QUALITY ASSURANCE GOALS: PRINCIPLES AND GOOD PRACTICE EXAMPLES

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Abstract: This paper seeks to set up a ground for including financial dimension to the HEI’s quality assurance and quality enhancement strategy. The focus is on a balanced institutional approach to financing and resourcing quality assurance goals on a long term basis. The discussion starts with the assumption that the quality strategy of the university would not be viable in a long run if the structures and activities it includes are not properly resourced and effectively managed. The author applies the balanced score card methodology to establish a number of principles guiding the financial approach of the institutional management bodies to their quality-related strategies. Each principle is then explained and provided with a set of questions, guiding its implementation in the process of financial strategic planning. Since the questions tend to reflect examples of good practice provided by diligent universities, they can be used as reference points for the modelling of individual institution’s approach to financial management for the achievement of long term quality goals.

Keywords: higher education, quality assurance, quality enhancement, strategic planning, financial strategy, institutional management, quality management, resource management, guiding principles, good practice.

Introduction

A Quality assurance and quality enhancement strategy of the university would not be viable in a long run if the structures and activities it includes are not properly resourced and effectively managed. A carefully developed financial approach would be needed to support the strategic goals and initiatives designed to ensure good quality of teaching, learning and research. Such an approach could be part of a comprehensive financial strategy, concerned with financing the overall strategic plan of the institution, or it could be specifically designed as part of the quality assurance and quality enhancement strategy. Whatever approach the institution might decide to choose, the people involved would need to consider and agree on a certain set of principles that will guide them in the process of strategic planning and management for better quality.

A financial strategy could be seen as one of several strategies of an HEI, all of which contribute to its mission, and should have a similar life-span to the institutional plan (usually three to five years). In such a context, the relationships between QA strategy, the Financial strategy, and other possible strategies at an institution for higher education (HEI) are illustrated by Figure 1.

In this view, the academic (output) strategies for education and research should be the main drivers of institutional objectives and activity plans. The resource strategies, including finance and quality assurance, have an enabling role to ensure that the right resources (financial and organisational) are provided to support academic activities and the quality objectives.

Some higher education institutions have adopted this view in their internal management processes. However, a number of institutions see the financial strategy as interwoven with all the other (academic and non-academic) strategies of the institution. Whatever the case, the financial strategy is regarded as a necessary instrument for achieving the primary objectives of quality teaching and research and for the sustainability of the institution. A broader interpretation suggests the development of financial ‘component’ in each particular strategy, describing how the achievement of

its specific goals and objectives will be resourced, rather than a stand-alone financial strategy for the institution as a whole. An alternative to this would be to develop a distinct strategy, where sections about quality assurance and quality enhancement, research, teaching and learning will be included. Figure 2 illustrates this approach in a simplified way and is not intended to discount the importance of different strategies.

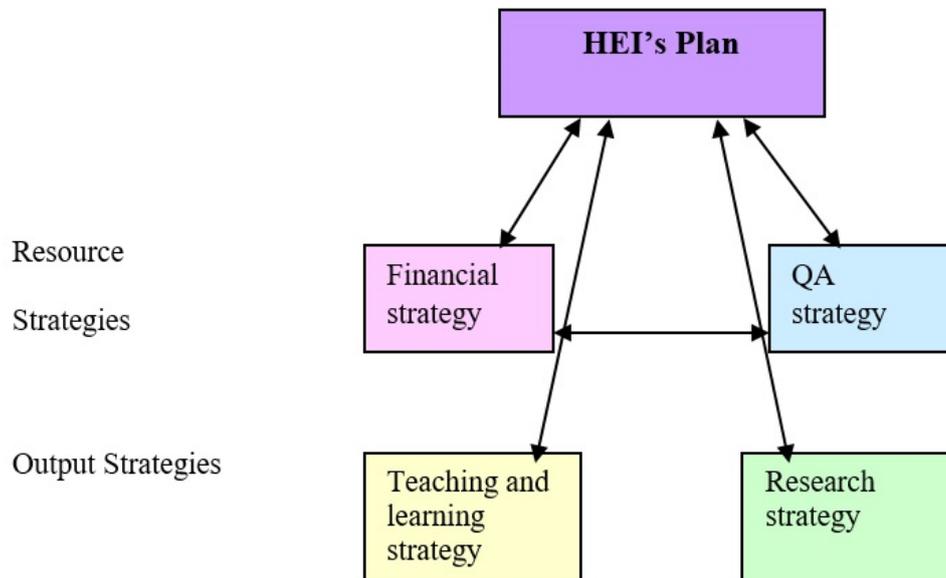


Figure 1: Quality enabling strategies of an HEI

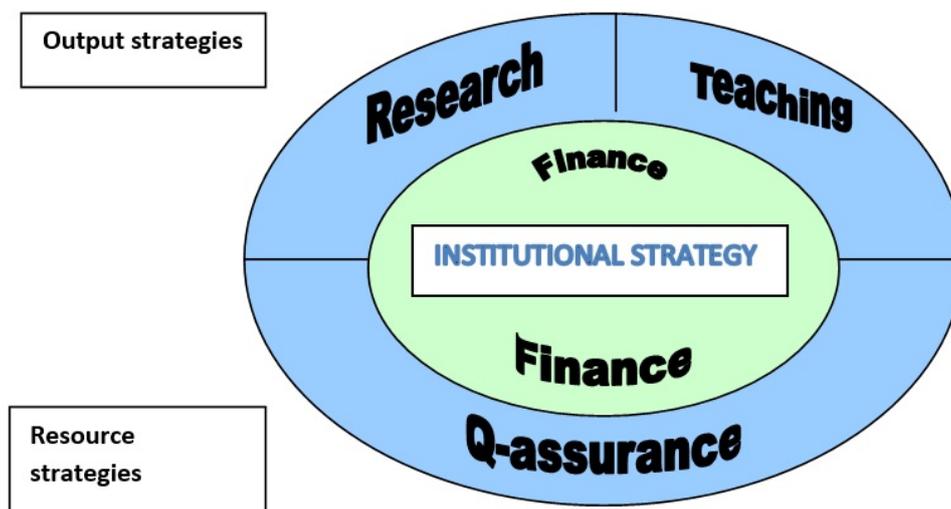


Figure 2: Related strategies of the higher education institution

The guiding principles and examples of good practice for higher education institution's resource management, provided in this paper, suggest a broader and more comprehensive approach (closer to Figure 2), but do not exclude the narrower interpretation. These are about financial strategy as a component of all the institution's strategies, and include some issues that will primarily be addressed within other strategies (such as those for quality assurance, research, and learning resources). This approach is appropriate when institutions will have to integrate all their strategies in the long term, and therefore will need to consider both perspectives.

What are the benefits from including financial dimension to the HEI’s QA strategy?

Developing a financial aspect or micro-plan of the QA strategy will ensure that institution’s plans regarding quality and associated activities are viable and consistent, as well as balanced. In particular, it will help them to:

- a. Set priorities and manage operations, recognising the financial constraints to sustaining and improving the academic standards and quality.
- b. List and calculate future resource needs, including the need for investment to innovation and protect intellectual property.
- c. Review and decide about strategic opportunities, such as for research and educational collaboration, online programmes and student-centred learning, and for development of new programmes and modes of learning on demand from the labour market.
- d. Manage resources effectively in a way that satisfies external stakeholders without damaging the quality culture of the institution.
- e. Minimise financial risks for the academic programmes’ delivery and achievement of education and research goals.

Most institutions receive income for their main activities at levels that are below the full economic cost. They also do work for the local community, which is unlikely to cover its costs. In addition, they operate under pressure of reduced income from student fees due to significant cut of their numbers, competitive research funding, and growing accreditation costs. Continuous periods of underfunding in the case of countries with economic difficulties, like Bulgaria, led to the development of a ‘low-price culture’ in higher education, with risks that institutions cannot invest adequately to maintain their competitive position, or to retain the younger staff and reputation they need for future success. Quality-related Government initiatives, in the form of additional allocated performance based funding¹, can help to fund investment, but they are usually short-lived and, as practice shows, directed to support immediate needs of the institution. Bulgarian case supports the recent research findings about higher education systems that experience significant public cuts tend to pursue short-term operational efficiency.² In this context, achieving an appropriate and sustainable financial and resource balance is of key importance, as well as finding ways to invest into quality of teaching, learning and research.

Key issues for consideration in developing the financial component of the QA strategy

The next section focuses on several guiding principles of strategic financial and resource management. These are set out below, with some questions which may help institutions to assess the adequacy and completeness of their approach to funding quality initiatives and transformative processes. In detailed coverage of the questions, the principles and self-assessment questions are separated from the possible answers, provided as examples of good practice. These examples of good practice are just illustrations and there is no obligation to follow them.

¹ Such funding is available to public universities in Bulgaria and is based on their ranking position. Romanian government is currently considering the introduction of a ranking system similar to that in Bulgaria as well. See: <https://rsvu.mon.bg>

² Kupriyanova, V., T.Estermann and N. Sabic (2018) Efficiency of Universities: Drivers, Enablers and Limitations. In: A. Curaj, L. Deca, R. Pricopie (Eds.) European Higher Education Area: The impact of past and future policies. Vol. 2. Springer Open. P. 601.

The guiding principles³:

Principle 1: Long-term viability and matching resources with institutional objectives

- 1.1 What are the financial implications of our institution's vision and mission and of our associated quality assurance initiatives?
- 1.2 Are our objectives, resources and structure for quality assurance balanced well?
- 1.3 How do we ensure that our quality strategy (supporting the research, teaching and learning) is achievable in financial terms?
- 1.4 Can measures improve the financial performance without damaging academic standards and quality objectives?
- 1.5 Do our financial approach and processes support the financial strategy?

Principle 2: Maintaining productive capacity to meet current objectives

- 2.1 Do we have the right level of productive capacity in each key resource enabling the achievement of our university vision and academic positioning on the higher education market?
- 2.2 Do we have the right staff, and policies which enable staff to maximise their contribution to quality assurance activities?
- 2.3 Are we exploiting and managing physical and intellectual assets appropriately?

Principle 3 Evaluating strategic opportunities and managing risks

- 3.1 How can the financial strategy help to support and prioritise strategic opportunities?
- 3.2 Had we provided enough space for growth and change?
- 3.3 How do we manage risks?
- 3.4 How can we minimise the impact of unexpected declines, e.g., decline in student numbers?
- 3.5 Have we maximised the potential contribution of strategic alliances and collaboration, e.g. in European universities' networks?

Principle 4 Linking financial and Quality assurance strategies

- 4.1 Is the strategy based on accurate and objective analysis?
- 4.2 How do we ensure that the financial strategy is properly integrated with the output strategies (teaching, research, etc.) and other resource strategies (e.g., quality assurance strategy) of the institution?
- 4.3 How do we ensure that the strategy is implemented and reviewed, and that nonconformities are detected at an early stage?

Principle 1: Long-term viability and matching resources with objectives

The financial component of the QA strategy (or 'financial strategy') should set the financial performance objectives for a viable level of quality assurance activities by the institution, while matching resources with objectives in the medium term (e.g., for the period of 2-3 years).

1.1 What are the financial implications of our current academic positioning (our vision) and associated quality assurance initiatives? In attempt to answer this question successful higher education institutions do the following:

- The financial plan includes forecasts of levels of activity (staff numbers, income from Quality assurance-related Projects, and so on) for all Quality initiatives and quality offices/units.

³ The following principles have been refined and discussed as part of the consultation on 'Financing the achievement of quality goals' for the members of the University of Montenegro working group for development of a quality assurance strategy. (EuropeAid/126526/C/SER/ME- National Qualification Framework and Quality Assurance in Education).

- These forecasts have been informed by analysis of quality review, monitoring and report cycles and units concerned, and have been examined and challenged for realism, balance and achievability.

- Where expansion or other change is forecast, any costs associated with this (such as investment in staffing or new facilities) are included in the plan.

1.2 Are our objectives, resources and structure for quality assurance in an appropriate balance?

It is tempting to assume that the institution simply needs more funding to enable it to invest in new activity. However, it may be that assets are poorly managed and under-exploited, or that scarce resources are being taken up by relatively low priority activity. To overcome this, some institutions took a different approach:

- Quality Management Board and the senior Quality Manager have reviewed the overall balance of the institution’s Quality Assurance and enhancement activities and priorities, reflecting its current strategic positioning.

- They have considered the institution’s future place in terms of quality on the basis of existing resources and infrastructure, other higher education providers and competition, and past performance, and made a realistic assessment of potential.

1.3 How do we ensure that our quality strategy (supporting teaching and learning) is financially viable? Here are some examples of good practice:

- The potential for each of the study programmes at different degree levels is evaluated, including a review of the market and the scope for growth or diversification, and consideration of the financial implications.

- Cost data are used to understand the financial contribution from different modes of learning (full time, part time, distance education, e-learning, or any combination of these) in different departments, with more detailed analysis, such as course costing or benchmarking⁴, used on a periodic basis as appropriate.

- The institution sets targets for its teaching and learning performance⁵ – in terms of recruitment, retention and completion rates⁶, employability, external quality evaluation and accreditation, student to staff ratios, or cost per student.

- The institution considers the impact of changes in programmes offered, student mix, and delivery mechanisms (for example, more online-based learning).

1.6 Can efficiency measures improve the financial performance of the existing activity without damaging academic quality culture?

Efficiency is the relationship between inputs (such as staff time, space and supplies) to institutional outputs, such as student progression and research outputs. It means, getting more output for the same or less input.

⁴ Course benchmarking means that when you calculate the real cost of the course, let’s say in Tourism, you compare this cost with the cost of similar courses in Tourism in other universities, to be able to establish a benchmark that would satisfy your criteria for effectiveness. If the present cost of the course is below that benchmark, this may raise your concerns if the quality provided for this low cost is good enough. If the cost is above the benchmark, then you have to think how to minimise the cost in order to stay competitive on the HE market, as higher costs are usually associated with higher tuition fees than the tuition fees required by other institutions for the same degree. Thus the benchmark can provide a basis for financial planning decisions of the university managers.

⁵ As part of an EU funded project for institution building in Romania, higher education institutions and the national quality assurance agency (ARACIS) developed a Quality Guidebook to support the development of their effective internal quality assurance system providing examples of good practice in setting appropriate quality targets for teaching and learning performance.

⁶ The rate of completion is the number of students who complete successfully their studies on time compared to the total number of students enrolled into the same programme.

- Externally, opportunities are considered for bringing the institution into a better financial balance – for example through growth, rationalisation, merger, strategic alliance, collaboration, or sharing of services.

- Internally, issues might include internal restructuring, such as replacement of small academic departments by fewer larger business units (schools) with more support staffing; changes in the programmes offered; different relationships between academic units and the centre; and new resource allocation and budgeting models.

- The institution has considered the following options:

- zero-based or priority-based financial planning rather than incremental planning⁷
- the scope for business process re-engineering or other similar fundamental reviews of processes and systems
- alternative delivery methods, such as outsourcing, and market testing, within a procurement strategy
- the balance of direct and indirect (support) costs; for example, how much academic staff time is spent on support activities.

- The institution benchmarks itself against and shares good practice with appropriate peer institutions.

1.7 Do our financial policies and processes support the strategy? To answer this question we start from asking ourselves more general questions:

- How well do our policies, processes and culture support the strategy in terms of:

- management structure, culture, incentives and rewards
- resource allocation policies
- management information systems
- support and training to all budget holders

Here follows some measures and activities taken from other universities as examples of good practice:

Strategic financial measures of viability (These are illustrative, not prescriptive.)

- Surplus and cash/liquid assets
- Accumulated surpluses (general reserves)
- Ratio of current assets to current liabilities (current ratio)

Activities (such as teaching and research)

- Surplus or deficit on each activity, for the institution and by department
- Proportion of income from non-publicly funded teaching sources
- Units under a minimum ‘economic’ size
- Surplus or deficit on publicly-funded research and non-publicly funded research, for the institution, and by department, and by main research sponsor type

Comparisons of the above results with peer institutions

- Mix of research funding by sponsor type
- Surplus or deficit on ‘Other’ activities, by type of activity

Efficiency

- Staff: student ratios (taking into account part-time staff as well)
- Use of space and facilities
- Support costs as percentage of total costs, and support time as percentage of total academic time

⁷ Incremental budgeting is conservative way of budgeting designed in a way that allocation of resources is based upon allocations from the previous period. It assumes that activities and methods of working will continue in the same way.

Principle 2: Maintaining productive capacity to meet current objectives

The strategy should address the investment needs of the institution to maintain the value and contribution of human resources, physical assets, intellectual assets and information systems, and to deliver the various resource strategies which support the mission and current objectives.

2.1 Do we have the right level of productive capacity in each key resource enabling the achievement of our university vision and academic positioning on the higher education market? Here follows some relevant answers to this issue:

- The amount and type of physical infrastructure and resources are appropriate to maximise opportunities and performance:
 - The institution has defined standards in estates, libraries, and IT areas – for the quality of teaching rooms, maintenance condition, reader spaces, network capacity and so on.
 - The IT and library/learning resource strategies include assessments of capacity and investment needs.

2.2 Do we have the right staff, and policies which enable staff to maximise their contribution to quality assurance activities? To answer this adequately, we can do the following:

- The QA strategy provides an assessment of the numbers and mix of staff, and of needs and opportunities to maximise contributions from staff.
- The finance strategy reviews the proportion of total costs made up by staff and considers this against benchmarks for similar institutions.
- Investment in staff involved in QA & QE is addressed as part of the finance and QA&QA strategies

2.3 Are we exploiting and managing physical and intellectual assets appropriately?

To achieve this, our strategy should consider the potential to generate income or support major activities (teaching, learning and research) through better exploitation of physical assets. The institution needs also to consider its policy on the management of intellectual property and consultancy.

An example for Strategic financial measures of productive capacity:

Estates and physical assets

- Percentage of the estate that does not meet its target for maintenance condition and fitness for purpose, benchmarked against similar institutions
- Utilisation and occupancy measures
- Amount spent on major refurbishment or replacement of assets per annum as a percentage of current replacement cost or insurance value.

Staff

- Skills profile of staff
- Investment in staff development and performance management
- Numbers of support staff in relation to academic staff
- Percentage of academic staff time spent on non-professional work

IT, libraries and equipment

- Spend on IT as a percentage of costs
- Spend on libraries/learning resources as a percentage of costs

Principle 3: Evaluating strategic alternatives and managing risks

It would be beneficial for the higher education institution if its strategy provides a framework to help the managing body assess the implications and consequences of potential strategic developments and decisions, and to evaluate and manage risks which threaten delivery of the overall institution’s Plan.

3.1 How can the financial strategy/component help to support and prioritise strategic opportunities? Here follow some examples:

- We produced an investment plan that provides a framework against which to assess the costs and benefits of new ideas and opportunities.
- The strategic planning process includes a ‘balanced scorecard’⁸ approach, which identifies key performance indicators across the whole range of institutional activity.
- Resources are available to support the implementation of these decisions.

3.2 Have we provided enough space for growth and change?

Many institutions may find that a major focus of their financial strategy/component is concerned with maintaining capacity in the short term, and with essential investment to remedy past problems and to maintain their position in increasingly competitive markets (See Principle 2). By doing so, there is a danger that the strategy becomes entirely defensive. This may be unavoidable in a short-term recovery situation, but it can have negative effects on innovation and reputation, and the institution may miss opportunities. The following action can help the institution avoid this:

- The institution creates a room for positive change and development by:
 - targeting a level of surplus that exceeds immediate requirements (which may mean making hard decisions about activities that are in decline or not undertaking some activities)
 - keeping a small reserve, perhaps in the form of unused borrowing capacity or disposable assets, which can be called upon if an outstanding opportunity occurs
 - identifying the resources needed for development (which may be space or management time, as well as finance), and ensuring that these are not a constraint because they are being taken up by relatively low priorities
 - if this is a problem, considering short-term investments (such as renting space or using consultants) to free up resources for strategic developments
 - collaborating with other institutions, or partners, in areas where this is not a competitive threat, to take advantage of opportunities which the institution cannot manage alone.

3.3 How do we manage key financial risks? Here is how strong institutions answer this question:

- Key financial risks are identified as part of the strategic planning process (these will depend on the circumstances of the institution, and will change over time).
- For each key financial risk, the institution identifies the potential impact and actions that can be taken to mitigate that impact.

3.4 How can we minimise the impact of unexpected declines?

- To minimise the unforeseen, the institution undertakes scenario planning, examining a wide range of consequences, and quantifying these within reasonable assumptions.
- Early warning or leading indicators are used, related to the key financial and non-financial targets, with plans to take remedial action at the first signs of problems, rather than after these have become rooted.
- The institution undertakes critical reviews of non-contributing activity and of high-cost activity which makes a relatively low contribution, has high demands on scarce resources, or is relatively vulnerable to uncontrollable external events. Early action to reduce such losses can greatly improve resilience, rather than waiting until they threaten institutional viability.

– Where possible, adequate contingencies are built into budgets for cash, income and surplus, so that when unexpected downturns do occur there is still financial headroom to allow for recovery.

3.5 Have we maximised the potential contribution of strategic alliances and collaboration?

There have always been solid reasons for collaboration among academics on their academic work, and this is widespread throughout higher education. In the current context of the European higher education area and the Bologna process, there are now even stronger drivers to encourage

⁸ The method of ‘balanced scorecard’ is developed and used in strategic planning process by American strategic planning experts Norton and Caplan in 1996.

collaboration beyond strictly academic work, reaching out to the local community, business solutions and resolving contemporary problems of society.

- Governing bodies and senior managers have considered the potential benefits of the following (this is not a comprehensive list):

- collaboration on services and infrastructure (such as sharing facilities or buildings, and arrangements for internal audit)

- strategic alliances between HEIs (for example, shared or rationalised teaching and learning provision)

- strategic alliances with further education institutions (such as franchising and assured progression routes)

- If any options appear worth pursuing, then a more systematic option appraisal or feasibility study is undertaken.

Principle 4: Integrating financial and Quality assurance strategies

The strategy should be integrated with the output and other resource strategies, understood and owned by those involved in the management of activities and resources, based on a realistic strategic analysis, and supported by a process of monitoring and review.

4.1. Is the strategy based on thorough, accurate, and objective analysis?

- Deans and Heads of departments directly responsible for academic units are involved in the strategic discussions and decision-making of the institution.

- The process of developing the strategic plan involves objective analysis of the environment, markets, and potential performance of the institution.

- The amount of data which are collected and analysed varies between institutions, and there is a risk of trying to analyse too much data. Whatever the scale of the analysis, it is likely to be more valuable if it includes comparisons, both over time and with benchmark institutions and the HE sector as a whole.

4.2 How do we ensure that the financial component/strategy is properly integrated with the output strategies (teaching, research, etc.) and other resource strategies (e.g., quality assurance strategy) of the institution?

- The resource strategies consider the health of assets and resources and the sustainability of their contribution to academic objectives.

- The quality assurance strategy, in particular, considers the effectiveness of the institution’s learning, teaching and research infrastructure through a process of continuous monitoring.

- The draft finance and resources strategies are reviewed and approved by the same group, which includes heads of key academic and other departments. This is a critical process of balancing the objectives, resources and infrastructure of the institution.

- A ‘balanced scorecard’ approach is taken, which considers a range of key indicators for the institution so that investment and resources can be balanced across all strategies.

- The financial strategy summarises the main financial and other assumptions behind all the institution’s strategies, and provides the opportunity to identify inconsistencies between them.

- There is a consistency (in assumptions and methods) behind departments’ business plans and strategies.

4.3 How do we ensure that the strategy is implemented and reviewed, and that variations are detected at an early stage?

- The institution has clear and consistently applied mechanisms for establishing its academic objectives and outcomes.

- The institution seeks to ensure that its programmes of study consistently meet stated objectives and outcomes.

- Programmes of study are carefully and regularly monitored

- There is a formal process for monitoring and review, with reports to key institutional committees at pre-determined intervals.
- Deans and Heads of departments are involved in this process.

Linking governance, management and funding for performance

In a national discussion about EU models for higher education funding at the Ministry of Higher Education in Montenegro several years ago, participants from universities and the Ministries of Finance and Education agreed that policy should tackle simultaneously funding and governance and management. But in order to decide, which dimensions of governance matter for performance and therefore for quality assurance, a rigorous analysis and research is needed to pin down the drivers of university performance. One governance indicator which all pointed out as affecting performance was the budget autonomy. It was further indicated that current EU practice shows that the positive effects of having larger budgets per student are higher when the HEIs enjoy a higher degree of budget autonomy.

Similar discussions have been taking place in other countries of the region, including Bulgaria, Romania, Slovenia. Some countries introduced performance criteria gradually (Italy, where it concerns about 6% of total State financing), Romania had a fast evolution with 30% of the core funding determined by indicators and the peer review highlighted that the new funding arrangements have induced change in University management.⁹ Due to diversity of funding models in Europe, it is important to consider other determining factors, like size of the HE sector, age and other country specific effects. What is important to mention about these discussions is the acknowledged need for integrated policy efforts at both national and institutional levels, in order to achieve balanced financial plans for academic performance. The holistic approach to financial management, which links the key output activities of the institution (teaching, learning and research) with performance targets, offers better opportunities for quality assurance and quality improvement. Further study in this field would make institutional quality systems more robust and effective, with better prospects for sustainable results in their periodic assessment and accreditation.

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⁹ The European Commission (2017) Analysis of national public research funding (JRC Technical reports). Contract No. 154321. Emanuela Reale. ISBN 978-92-79-73407-6.