World Bank Reimbursable Advisory Service on Higher Education Financing in Latvia

Higher Education Financing in Latvia: Final Report

---

19 September 2014

Table of Contents

LIST OF ABBREVIATIONS 4

EXECUTIVE SUMMARY 5

1 INTRODUCTION 8

2 ADDRESSING THE MAIN CHALLENGES OF LATVIA'S CURRENT FINANCING MODEL 10

State funding (teaching and research) 10
Diversification of financial resources 11
Financial autonomy of HEIs 12
Student financing 12

3 REVISITING CRITERIA FOR GOOD FUNDING MODELS 20

4 REFORMING THE FUNDING MODEL FOR LATVIAN HEIS 25

4.1 Funding models considered 25
4.2 Positioning Latvia within European Trends 30
4.3 The Proposed Model 33
4.4 How Does the New Model Address the Main Challenges of the Current Model? 44
4.5 Impact on Different Stakeholders 47

5 FROM CONCEPTUALIZATION TO IMPLEMENTATION 50

5.1 Alternative Scenarios 50
5.2 Implementation Roadmap 53

APPENDICES 60

APPENDIX 1 SAMPLE PERFORMANCE AGREEMENT 60

Appendix 1.A Guidelines for a performance agreement 60
Appendix 1.B Example Structure Performance Agreement 63

APPENDIX 2 STAKEHOLDER REACTIONS 67

APPENDIX 3 STAKEHOLDER CONSULTATIONS 67

LIST OF BOXES

BOX 1: EXECUTIVE SUMMARY FROM "HIGHER EDUCATION FINANCING IN LATVIA: ANALYSIS OF STRENGTHS AND WEAKNESSES" 12
BOX 2: EXECUTIVE SUMMARY FROM "ASSESSMENT OF CURRENT FUNDING MODEL'S 'STRATEGIC FIT' WITH HIGHER EDUCATION POLICY OBJECTIVES" 17
BOX 3: MODELS OF PUBLIC FUNDING 20
BOX 4: HIGHER EDUCATION AS PUBLIC AND PRIVATE GOOD 27
BOX 5: LATVIA'S POSITION VIS-À-VIS EUROPEAN TRENDS 30

LIST OF FIGURES

FIGURE 1: RELATIVE IMPORTANCE OF INDICATORS USED IN FUNDING FORMULAE IN EUROPEAN HIGHER EDUCATION SYSTEMS 22
FIGURE 2: THREE-PILLAR MODEL OF STATE FUNDING 35
FIGURE 3: POSSIBLE DEVELOPMENT OF FUNDING PILLARS UNDER SCENARIOS A, B, AND C 56

LIST OF TABLES

TABLE 1: OVERVIEW OF MAIN CHALLENGES 10
TABLE 2: STRENGTHS AND WEAKNESSES OF THE LATVIAN HIGHER EDUCATION AND RESEARCH FUNDING SYSTEM 14
TABLE 3: STRATEGIC FIT OF THE FOUR COMPONENTS OF THE FUNDING SYSTEM WITH THE NINE THEMATIC GOALS 18
TABLE 4: THE IMPORTANCE OF INPUT- VERSUS OUTPUT-RELATED DRIVERS OF HEIS OPERATIONAL GRANTS 21
TABLE 5: OVERVIEW OF ASSESSMENT CRITERIA 24
TABLE 6: "GOOD-PRACTICE" MODELS HIGHLIGHTED IN THE EVALUATION THAT ADDRESS CHALLENGES SIMILAR TO THOSE IN LATVIA 26
TABLE 7: POTENTIAL PRIVATE AND PUBLIC BENEFITS FROM HIGHER EDUCATION 27
TABLE 8: MODELS OF PUBLIC FUNDING – EUROPEAN TRENDS AND LATVIA 30
TABLE 9: RESOURCE DIVERSIFICATION – EUROPEAN TRENDS AND LATVIA 31
TABLE 10: FINANCIAL AUTONOMY – EUROPEAN TRENDS AND LATVIA 31
TABLE 11: STUDENT FUNDING – EUROPEAN TRENDS AND LATVIA 32
TABLE 12: OVERVIEW – EUROPEAN TRENDS AND POSITION OF LATVIA 33
TABLE 13: OVERVIEW OF HOW NEW MODEL ADDRESSES CURRENT CHALLENGES AND MEETS CRITERIA 44
TABLE 14: CABINET REGULATION NO. 994 53

List of Abbreviations

EU	European Union
ESF	European Social Fund
EUA	European University Association
HE	Higher Education
HEI	Higher Education Institution
MoES	Ministry of Education and Science
MoE	Ministry of Economics
RAS	Reimbursable Advisory Services
RTA	Reimbursable Technical Assistance
R&D	Research and Development
SEDA	State Education Development Agency
STEM	Science, Technology, Engineering and Mathematics

Executive Summary

This report is the last in a three-paper series prepared by the World Bank Latvia Higher Education Financing Team between December 2013 and September 2014. The first paper, delivered on 18 March 2014, analyzed the strengths and weaknesses of Latvia's existing funding system, in accordance with criteria derived from good practice in European and international trends. The second paper, dated 18 April 2014, focused on how well the current funding model aligns with the strategic policy objectives specified by the Ministry of Education and Science (MoES). The findings from both of these papers pointed towards a misalignment between levels of public funding and the stated objectives of the government. Building on these insights, this report aims to develop a proposal for a new higher education financing model in Latvia. It outlines and evaluates this reform model against the same criteria used in the first report, taking into consideration existing data, feedback from the MoES, and stakeholder consultations.

Evaluating and developing a funding model requires a mutual understanding of what features, or criteria, constitute a "good" funding model. These criteria, which were initially used to evaluate the strengths and weaknesses of the current approach to higher education financing in the first report, now constitute the requirements or expectations around which a new funding model is elaborated. Examples of the criteria for a "good" funding model include: the **strategic orientation** of the system, and its ability to promote institutional profiles or national strategies; its **incentive orientation,** to the extent that the system provides clear performance rewards and sanctions to create a competitive environment; its **sustainability,** and whether it enables long-term planning for institutions or continuity in the system; **legitimization,** to the extent that there are unambiguous, balanced and transparent funding structures; **autonomy and freedom,** and whether institutions are able to make autonomous decisions about internal resource allocation; and **practical feasibility,** including administrative efficiency and coherence with funding levels and approaches.

These criteria and the primary challenges associated with Latvia's current approach to financing higher education and research provide the basis for developing a new funding model. Among the many strengths and weaknesses identified, two primary challenges emerge.

First, the system is significantly underfunded, compared not only to other European countries but, importantly, also vis-à-vis the government objectives, and legally-set targets – as a proportion of public spending and per study-place. Overall funding levels are very low (and the lowest in all Baltic states), and Latvia is well below European peers in terms of public funding for higher education.

Second, the current model's emphasis on inputs (i.e., enrollment) and its lack of a performance orientation actually appear to work against the spirit of quality education and research, especially given recent levels of funding for higher education as a sector. The current funding model provides limited incentives to promote national higher education strategies or strengthen institutional profiles.

In addition to these two primary challenges, the current dual track system, with its heavy emphasis on merit-based selection, is presumed to have negative consequences on widening access to higher education (e.g. for students from disadvantaged backgrounds) without some corresponding offering of means-tested financial aid.

The World Bank proposes a "three-pillar" funding model designed to provide a balance of stability, performance, and innovation orientation.

- For continuity, the first pillar would mainly consist of a modified version of the study-place model, as its input-oriented approach remains an important element of the state-funding system. It also includes a per-capita funding component based on the number of professors or academic staff to enhance the available funding for basic research and to align further the teaching and research funding.
- The second, performance-oriented pillar, contains a small number of indicators derived from national strategies and of general relevance for all Higher Education Institutions. Part of the allocation under the second pillar is reserved for institutional performance indicators which are university-specific and related to the profile and strategic development of the institution. This leads to a situation where specific performance criteria do not have equal importance for every institution and fosters institutional diversity. Considering these nuances, the formula should contain an element with institutional performance indicators (specific for each university and agreed upon in the performance agreement). A university's performance, for example, could be measured using up to three specific indicators with institution-specific weights. This part of the formula needs a different algorithm: as the indicators per institution differ, a formula is needed that makes the outcomes comparable and the distribution calculable.
- The third, innovation-oriented pillar, provides funding for activities that contribute to the targets set in a university target or performance agreement. This pillar also contains the funding of research centers of excellence, accounting for research evaluation outcomes and a national strategy for research priorities. The targets incorporate national priorities, and operationalize university profiles and strategies. Although the performance-oriented (Pillar 2) component of the performance agreement is focused on selecting a few relevant indicators that are specific to the institution's mission, the third pillar is assessing more broadly how the institution will contribute strategically to Latvia's higher education vision, mission, and objectives. The priorities must naturally address teaching and research, but they should also extend to all kinds of third mission and knowledge transfer activities. The performance agreement also defines innovative measures to be taken to achieve these goals if there is a need for pre-funding of actions. This funding comes from a pool of money and is defined per action.

In such a model, stable funding is combined with a performance-oriented component, using a formula with performance indicators, and an innovation-oriented component allocated via performance agreements. The performance partly rewards and sanctions past performance (ex-post funding), whereas the innovation-oriented component provides financial support for the attainment of future objectives determined by a negotiation between individual universities and the ministry (taking into account state goals and institutional profiles). To complement the three-pillar model, the report also

addresses the issue of cost-sharing and emphasizes that means-tested or need-based financial support can widen access and address equity concerns.

On the basis of the three-pillar state-funding model, three scenarios emerge in which a new funding model for higher education in Latvia could potentially operate. These scenarios are determined by the extent to which the system could garner additional funding from the state (and, to a lesser extent, funding from private entities), and indicate the priority components for implementation in each instance.

The report provides overall direction for Latvia's future higher education funding model; however, its adoption and subsequent implementation lie with the Government of Latvia and the sector. Similar to the process employed to develop this proposal, the implementation of a new funding model and student financing should be conducted in close collaboration between the government, ministries, higher education institutions, and various other stakeholders. A high-level implementation roadmap outlines the strucutre and next steps should Latvia proceed with the recommended reforms.

1 Introduction

This is the third and final report in a series of three papers produced under the World Bank Reimbursable Advisory Service on Higher Education Financing in Latvia between December 2013 and September 2014.[1] The World Bank was invited, as an external partner, to develop a proposal for a new higher education financing model in Latvia that takes into account jointly developed criteria and feedback from the Ministry of Education and Science (MoES), good international practice, and stakeholder consultations.

The topic of higher education financing in connection with envisaged quality enhancement has been on the agenda for a long time in Latvia, spurring disagreements between key actors. Interest in the development of a new funding model was further fueled by the European Commission's 2012 and 2013 Country Specific Recommendations for Latvia. The design of an adequate funding model is crucial for the development of higher education and research, as it determines the performance and competitiveness of higher education institutions.

To accomplish its objectives, the project was planned in three stages, each with corresponding deliverables. The first stage in the project's methodology was an analysis of the strengths and weaknesses of Latvia's current approach to higher education financing based on European and international good practice. The outcomes (including a description of the status quo of higher education financing) of this phase are detailed in a report dated 18 March 2014.

The first report discussed prominently the significant structural underfunding of the Latvian higher education system and the lack of further-reaching performance orientation and incentives for agreed strategic goals, which also emerged as a major finding in the second report. In addition, the first report discussed the existing dual track system of student fees (with relatively high fees for many full fee-paying students as opposed to free higher education for students on state-subsidized study places).

The second stage of the project, which focused on how well the current funding model aligns with the policy objectives specified by the MoES, resulted in the World Bank's report dated 18 April 2014. This third and final paper builds upon these previous two by exploring options for the way forward.

Readers of the final report are encouraged to refer to the first two reports with questions regarding the team's assessment of the strengths and weaknesses of the current higher education funding model, related data, and discussions on the **fit of the current model with the strategic objectives** of the government. Although excerpts from the prior two reports are contained within this final report, **the three reports and their respective conclusions are to be seen as a unit**.

[1] The term 'higher education' is used in this report in a comprehensive and inclusive manner; i.e., it is used to describe any form of tertiary education at the post-secondary level, if not specified otherwise.

As with the prior reports, the findings and recommendations contained within this report are based primarily on the correlation of existing data, document review, international experience, and multiple rounds of interviews, round-table discussions, and workshops.

These stakeholder consultations played a vital role in the project methodology and, thus, in the preparation of this final report. The World Bank team would like to express its gratitude to the MoES and SEDA as well as to the many stakeholders (see Appendix 3) who provided valuable feedback throughout the engagement. In fact, the World Bank team would also like to encourage MoES to disseminate this report together with stakeholder reactions, which could form part of the report (e.g., Appendix 2).

Before turning to the recommendations, it should be noted that the **implementation of recommended reforms, though a critical step, is not part of Latvia's existing agreement with the World Bank**. Implementation activities, which, for example, might focus on (i) structural aspects of the model proposed, (ii) procedural and legal aspects of introducing the new financing model, and (iii) capacity building, are the responsibility of the Government of Latvia.

The nature of the World Bank team's task was to prepare a *proposal*. The decision to accept and implement the proposal will, however, lie with the Government of Latvia and the sector.

2 Addressing the Main Challenges of Latvia's Current Financing Model

This section summarizes the primary challenges associated with Latvia's current approach to financing higher education and research according to the World Bank assessment in prior reports "Analysis of strengths and weaknesses of higher education financing in Latvia" and "Assessment of current funding model's 'Strategic Fit' with higher education policy objectives" (Table 1).[2] These challenges are then reinterpreted as requirements for the new model. Consistent with the organizing structure of the World Bank's prior reports, the observations are organized by the four elements that are identified as crucial of a funding model in Latvia in this assignment, specifically for the operating budget (as opposed to capital investments) for higher education:

- State funding for teaching and research (allocation of state budget via study places and public research funding)
- Diversification of financial sources for higher education institutions (EU funds, tuition fees, market revenues, external research income, etc.)
- Financial autonomy of higher education institutions (lump-sum versus line-item allocations, freedom to spend money flexibly and build financial reserves, financial regulations, discretion to set salaries, etc.)
- Student funding and support (tuition fees, individual financial situation of students, loans, scholarships, etc.)

Table 1: Overview of main challenges

Category	Main Challenge for Current Model	Requirement for New Model
State funding (teaching and research)	Latvian higher education is underfunded, in terms of both public and private funding, in comparison to most other European countries and to its own governmental objectives. It is likely that structural underfunding leads to performance constrains and quality problems in all respects (teaching, research and service), as well as to problems with international competitiveness of the sector.	To create a "package deal" by modernizing the financial model and strengthening its link with policy objectives, which should make for a strong case to increase the level of public funding. The new model needs to create added value in terms of stimulating use of strategic orientation and national objectives in order to justify possible increases of public funds.

[2] For more information, refer to "Assessment of Current Funding Model's 'Strategic Fit' with Higher Education Policy Objectives" dated 18 April 2014.

	The study place model and state research funding model are not creating meaningful and appropriate performance incentives for HEIs. The model does not offer significant incentives for improving teaching and research quality, employability of graduates, research productivity and internationalization.	To introduce teaching and research related performance-based funding elements in order to create financial incentives for higher education institutions to produce desired outputs and outcomes.
	The study place model and research funding streams (including EU Structural Funds) can be administratively burdensome and do not always contain clear and transparent incentives for diversifying institutional profiles, consolidation activities between HEIs, collaboration between research organizations or with external partners (specifically industry).	To offer clear and transparent incentives for diversifying institutional profiles, consolidation activities, incentives to promote collaboration between HEIs, research organizations and external partners. To create a model that minimizes the administrative burden as much as possible.
	The funding model lacks alignment of basic funding of teaching and research. Divided funding streams for teaching and research hinder an alignment of the HEIs core missions of teaching and research.	To lead to a closer alignment of teaching and research streams in overall architecture of state funding.
	The state funding model is rather "one-dimensional" and static as a whole, as it offers HEIs only limited incentives for promoting national higher education strategies and strengthening institutional profiles. More specifically, it is lacking two important pillars of funding, namely performance-oriented funding and innovation-/profile-oriented funding.	To make a transition towards a "three-pillar model" consisting of pillars (1) basic funding, (2) performance-oriented funding, and (3) innovation-/profile-oriented funding for achieving greater balance between stability, performance-orientation, ex-post and ex-ante incentives.
Diversification of financial resources	The high reliance on tuition revenues (education) and EU Structural Funds (research) is likely to harm the long-term financial viability of HEIs. At the same time, income from private sources such as industry or community services	To support further and more balanced resource diversification (both public and private resources) that reduce too high and potentially harmful resource dependencies of HEIs. To provide long-term funding for long-term activities.

	appears to be relatively underdeveloped.	
Financial autonomy of HEIs	Latvian HEIs enjoy significant financial autonomy and, as such, can flexibly, efficiently and effectively spend their resources and act as competitive organizations. HEIs do not always fully use the autonomy they have. This great level of autonomy is not always accompanied by a high level of accountability towards external stakeholders (both public and private).	To enable state and institutional decision-makers to make full use of the potential of autonomy. Supporting greater accountability by emphasizing performance measurement with regard to the volume and quality of teaching and research. However, increased use of accountability measures should not negatively affect the level and scope of HEIs' financial autonomy.
Student financing	The dual track system (i.e., state supported study places and tuition fee funded study places) with merit-based selection of students for state-funded study places is likely to subsidize full-time students from better-off socioeconomic backgrounds. The current student support system is highly decentralized, and its strong merit-based emphasis (including the requirement to find a loan guarantor) is likely to have a negative impact on higher education access and participation for students from disadvantaged backgrounds and, to some extent, part-time students.	To ensure access and participation by introducing more need-based elements in the student funding system (including state supported study places, scholarships, loans, and other subsidies). To enhance transparency and equity, the allocation of student support needs stronger central coordination.

For additional context on the main challenges of Latvia's current funding model, the executive summaries from the World Bank team's two prior reports are excerpted below in Box 1 and Box 2:

Box 1: Executive Summary from "Higher Education Financing in Latvia: Analysis of Strengths and Weaknesses"

Higher education is an increasingly important topic on national policy agendas for many countries. As a significant driver of national economic competitiveness in an increasingly knowledge-driven global economy, higher education policy issues have received increased attention. Alongside the increased policy importance of higher education, many systems also face serious challenges maintaining their quality and relevance and in increasing the efficiency and securing equity in the field of higher education. New higher education financing models are being developed in many European countries as

policy responses to these challenges.

The Latvian higher education system has been underfunded for years. Overall funding levels are very low (and the lowest in all Baltic states); **however, in terms of public funding for higher education, Latvia figures at the bottom across European comparisons,** with an allocation of 0.8 percent of GDP as compared to 1.27 in Lithuania; 1.23 in Estonia and an EU27 average of 1.26 (Eurostat, 2010). Although the report at hand will largely focus on funding mechanisms as opposed to funding levels, it is important to keep this point in mind when the current Latvian funding system's strengths and weaknesses are discussed.

The topic of higher education financing often spurns controversy, in Latvia as elsewhere, with the discussion focusing on the question of whether higher education is a public or a private good, whether it should be funded from public resources or students' contributions —with related policy implications for public and private funding. The report argues that the outcomes of higher education have characteristics of both public and private goods, and that acknowledging economic arguments might help to avoid political reform blockades.

Student funding—that is, student contributions (mainly tuition fees or other fees paid by the students) and student financial support systems (mainly grants and loans)—is clearly among the most controversial issues in the sphere of financing higher education. Approaches that place fees and loans at the center tend to meet criticism all across Europe on the grounds of their expected negative effects on equity. However, tuition fees—combined with adequate and well-targeted student support schemes —generate additional revenues for HEIs, thus enabling increases in participation rates. They are also regarded as more equitable by some, since they transfer part of the instruction costs to those who will directly (and disproportionately) benefit from higher education.

Latvia's Funding System in the Light of European Developments

Compared to other European countries, Latvia scores high in the area of financial autonomy. It is ranked 4th among the 28 European higher education systems in EUA's "University Autonomy Scorecard". Providing a higher level of institutional autonomy is often expected to improve the performance of higher education institutions (HEIs) and higher education systems as a whole. It is assumed that the more autonomous HEIs are, the better equipped they are to generate additional resources through fund-raising or efficiency measures, with the freedom to orient their strategy towards available funds, focusing potentially on their specific research strengths or shifting the balance between education and research. Based on this assumption, many governmental authorities among European countries have granted HEIs more freedom to manage their resources and develop new income-generation policies.

Contrary to many other European systems, the current funding model in Latvia does not offer significant incentives for greater performance- and output-orientation. The main purpose of performance-based funding is to create financial incentives for higher education institutions to produce outcomes in certain areas of their activities which want to be encouraged by the funder. There are different ways in which to cluster allocation models in the funding of higher education institutions. Three typical pillars of funding models concern basic funding, performance funding, and innovation-

/profile-oriented funding. The innovation-/profile-oriented funding component in Latvia is currently composed of a number of different types of smaller and larger third-party funding streams (including EU Structural Funds) but not included in the system of state funding. In contrast to the tendency of many European higher education systems to adopt more performance-based elements in their funding mechanisms, the Latvian model has remained predominantly input-related and formula-based. The elements that are said to be performance-oriented, such as the European structural funds as well as the national competitive research programs, are not perceived by the authors to use transparent competitive criteria. This implies the system does not fully exploit its competitive capacity and strife for excellence.

Latvia has a dual-track tuition fee system with—in some cases—relatively high fees and relatively many fee-paying students. The Latvian higher education system offers mainly merit-based support in the form of state funded study places, and relies more on government-subsidized, mortgage-style loans offered by commercial banks, rather than grants. While there are concerns amongst stakeholders that 'the best students migrate to countries where students do not pay fees', this causal chain appears in fact unlikely, given that these students study for free in Latvia. To the extent that such migration of particularly gifted students takes place at the tertiary level—and more research would certainly need to be done on this issue—it would most likely be fueled by quality concerns and more general economic considerations as opposed to the current fee structure in Latvia. There is no general European trend in this area: some European countries that have previously introduced tuition fees later decided to abolish them either entirely or partly. At the same time, other European countries have decided to increase the share of private investment by allowing public HEIs to introduce fees or charge higher fees while at the same time promoting equity of access by restructuring their student support systems. Need-based grants are the most frequently used modes of student support across European higher education systems.

Strengths and weaknesses of the Latvian funding model

Derived from European trends and international practice, Table 2 provides an overview of the strengths and weaknesses of the Latvian higher education and research funding system according to the aforementioned categories of criteria. It distinguishes between the context of the funding system and the features of the funding system itself. Many of these issues relate to more than one criteria dimension.

Table 2: Strengths and weaknesses of the Latvian higher education and research funding system

STRENGTHS	WEAKNESSES
Context: Strategic orientation	***Context: Strategic orientation***
• Diverse system of HE (many institutions, niche players, different profiles, public-private) • Substantial number of private HEIs • Start-up of quality assurance for study	• Apparently low political priority given to HE and science (regarding low spending on HE and R&D) • Inconsistent policy measures and political reform blockade because of polarized

programs and research institutes • Research institutes with more mass and focus • High percentage of young people who qualify for HE • High employment rate and high rate of return on HE • A functioning data monitoring system (including performance and financial data) • High adaptability of system and HEIs demonstrated in times of economic crisis • MoES and line ministries are multiple voices for the interests of HEIs	discussions (public vs. private good) • Many relatively small study programs • Tendency to study abroad • Opaque HR structures in HE, with opportunities to have more than one job • High teaching loads for staff; little time for research • Quality assurance for teaching and research only in start-up phase • Many graduates seeking employment abroad • No clear way to consolidation vs. competition yet
Financing: Incentive Orientation • Study places allow national planning according to labor market needs • Study places offered on basis of merit including rotation possibilities stimulate competition • EU structural funds for research allocated with some form of competition • Attract many fee paying students (willingness to pay/additional resources for HEIs) • Existence of performance contracts between HEIs and ministry	***Financing: Incentive Orientation*** • One-pillar model of state funding instead of several pillars with balanced functions • No real performance orientation in state funding (hence also weak links to national or institutional strategies) • No funding for innovative initiatives • No clear approach to the role of state money for private HEIs • No funding options for research-related developments such as post-docs, knowledge transfer activities, etc.
Financing: Sustainability • Study places funding provides cost-oriented stability in the system, but with a "money follows student" element • Availability of substantial EU structural funds for HE and R&D (reason for survival in economic crisis)	***Financing: Sustainability*** • Underfunding of the HE and research system compared to most other European countries and to own governmental objectives • Promised funding increase not yet effectuated • Lower funding tariffs for HE students compared to primary and secondary education • Cost basis for subsidized study places outdated
Financing: Legitimization • Availability of student loans for many students with attractive repayment conditions • Full-fee paying option creates access opportunities	***Financing: Legitimization*** • Many competing needs in case of budget increases (more quality in teaching, PhD schools, post-doc careers, triple helix, etc.) • Opaqueness and subjectivity in allocation of subsidized study places, planning problems

	through yearly interventions • Subsidized study places particularly benefit students from better socio-economic backgrounds • No subsidized study places for part-time students • Student loans not attractive to some groups, e.g., the "guarantor requirement" forms a big hurdle • Hardly any need-based support nor means-testing mechanism for students from low-income families
Financing: Autonomy and freedom • Large degree of (financial) autonomy for HEIs • Financial autonomy allows entrepreneurial freedom • Substantial level and good framework conditions of resource diversification	***Financing: Autonomy and freedom*** • Heavy reliance on EU structural funds for R&D, which may not be a sustainable long-term situation (plus co-funding problem in case of matching funds) • Relatively low funding from industry/ companies
Financing: Practical feasibility • Substantial outward international student mobility (many systems have problems to send students abroad). This means other countries pay for the instruction costs.	***Financing: Practical feasibility*** • Decentralized system for student loans and scholarships (efficiency risks and problems for HEI with needs assessment) • Debt cancellation mechanisms too generous • Mismatch between academic year and fiscal year

Latvia has a diversified higher education sector including capital, regional, public and private higher education institutions. Universities enjoy a significant amount of financial autonomy which allows for resource diversification. The funding model based on study-places provides some basic stability for the sector and is related to sector-level planning geared towards labor market needs. In addition, Latvia has a high number of full cost-covering fee paying students and a significant share of research funding coming from EU funds.

However, as mentioned above, **the system is significantly underfunded in comparison to not only other European countries but, importantly, also vis-à-vis the government objectives and legally-set targets, both as a proportion of public spending and per study-place**.

While, in principle, public funds are allocated according to study places, i.e., educational needs, this is *de-facto* nearly the only public funding instrument, and thus has to accommodate many competing needs (partially related to research and wider institutional missions) of universities. The small performance-oriented elements, such as small competitive research funds, use criteria which are not transparent to the stakeholders and thus miss the desired effects. In practice, the system is partially opaque and leaves room to subjectivity, both with relation to the allocation of study places and research

funds. Also, there are planning problems due to annual interventions (while MoES has a different fiscal year from higher education institutions). The cost basis for the study places in legislation is outdated while universities only receive 80 percent of the defined minimum costs.

The current strong merit-based approach to budget places and grants raises questions about equity, as subsidized study places and scholarships are available to the "best students" and thus are most likely to particularly benefit students from better socio-economic backgrounds. It can be questioned if this really stimulates academic excellence within the whole system. The decentralized loan system appears to be generous, but in reality creates practical problems and appears not to be attractive to those who might need it most. There is very little needs-based support or means-testing mechanisms for students from low-income families.

The current public funding model appears as a largely input based 'one-pillar' model which, overall, does not represent a balance between stability, performance, and innovation orientation. This also means weaker links between public funding and national and institutional strategies. In addition, the system relies heavily on EU funds, in particular for research and development which might not be a long-term solution to stable research funding while also funding from industry and other private sources appears to be underdeveloped.

Box 2: Executive Summary from "Assessment of Current Funding Model's 'Strategic Fit' with Higher Education Policy Objectives"

For the purposes of this assessment, the strategic objectives for higher education identified in the key policy planning documents were clustered into the following nine thematic goals:

1. Increase the quality of education and link with the national economy
2. Increase the quality and (international) competitiveness of research
3. Increase sector efficiency
4. Enhance technology, innovation, creativity, and entrepreneurship
5. Renew and develop the human resources of higher education institutions
6. Stimulate participation in and access to higher education
7. Stimulate internationalization in higher education
8. Enhance funding base of higher education
9. Establish a new and transparent approach to quality assurance

Consistent with the Bank's first report, this paper also explores the current funding model for Latvian higher education through four components (instruments of state funding, diversification of financial resources, financial autonomy, and student funding) to determine how each aligns with the thematic

goal. Table 3 below summarizes the overall assessments regarding the strategic fit of the four components of the funding system with each of the nine Thematic Goals. The scores vary from a strong positive strategic fit (indicated with "++") to a strong negative fit (indicated with "--"). A neutral relationship is indicated with "0".

Table 3: Strategic fit of the four components of the funding system with the nine Thematic Goals

THEMATIC GOALS	State Funding	Resource Diversification	Financial Autonomy	Student Funding
1. Quality of education	- -	+	+	-
2. Quality of research	- -	+	+	+
3. Sector efficiency	- -	-	+	+
4. Technology, innovation, creativity and entrepreneurship	-	- -	0	0
5. Human resource development	-	+	+	0
6. Participation and access	- -	++	0	- -
7. Internationalization	-	0	0	-
8. Funding base	- -	-	0	+
9. Transparent quality assurance	+	0	0	0

As the table demonstrates, the overall funding model, particularly the basic funding for teaching and research, does not align well with the Thematic Goals for Latvian higher education. In general, this does not mean the policy objectives cannot be met, since other policy instruments can also be effective. However, the structural underfunding of the system together with the current model's emphasis on inputs (i.e., enrollment), and its lack of a performance orientation actually appear to work against the spirit of quality education and research. Increases in state investment in higher education, in accordance with current legislation, could go hand-in-hand with the introduction of more performance-driven and innovation-oriented funding instruments that provide incentives for the system to move in the desired direction of enhanced teaching and research quality.

Though the strong reliance on tuition fees and on EU structural funds should, in theory, steer higher education towards greater relevance to societal and economic needs, the incentives are not strong enough. Both tuition fees and EU funds are currently relied upon to maintain the functioning of the system and support the status quo, so they are unable to work effectively as instruments that guide towards greater quality, creativity, innovation, and entrepreneurship, especially in light of current economic and quality assurance realities.

While financial autonomy is high in Latvia, some institutions have not utilized their full potential in this respect. Certain institutions are being creative in developing alternative revenue sources, but the

resultant funds are necessary to offset the low level of state investment in the system, so there is not much ability to reinvest in new opportunities, partnerships, or innovation. Additionally, some other institutions do not appear to be fully aware of their autonomy. The system would benefit from financing instruments that allowed it to incentivize, for example, partnerships with the private sector for revenue-generating research or training collaborations.

Finally, Latvia's current approach to student funding appears to have a slight misalignment with the Thematic Goals, particularly as it relates to internationalization and expanding access. Latvia would be well advised to reconsider how student financing could better align in a more supportive way with key policy objectives.

3 Revisiting Criteria for Good Funding Models

In order to analyze the strengths and weaknesses of the current higher education funding system in Latvia and recommend adequate reform strategies, one must start with a clear understanding of what is meant by a funding model and then consider normative criteria representing the features of a "good" higher education funding model. In other words, any recommendations should be based on and justified by mutually agreed criteria.

To start, Box 3 clarifies what is meant by the funding model and provides examples of different types of funding models commonly employed throughout Europe:

Box 3: Models of public funding

There are a number of different ways in which to categorize or cluster alternative allocation models in the funding of higher education institutions. A frequently applied categorization distinguishes between negotiated, incremental, formula, and competitive funding (e.g., Eurydice, 2008; Jongbloed et al., 2010). For practical purposes, this report adopts the categorization of Ziegele (2013) who has identified three typical pillars of funding models: (i) basic funding; (ii) performance funding; and (iii) innovation-/profile-oriented funding.[3] Regardless of the diversity throughout higher education systems and funding models in Europe, these three pillars can, to a certain extent, be identified in most systems. Negotiated, incremental, formula and competitive funding are instruments that could be applied within the three specific pillars.

Basic funding can be described as an amount of public funding that remains largely stable over a specific period of time. The purpose of basic funding is to provide predictable and reliable financing that covers the main part of operational costs, thereby enabling HEIs to perform their core tasks of teaching and research (Ziegele, 2013, pp. 73–74). As previously discussed, in most European systems, public authorities distribute basic funding to HEIs through the use of block grants. The overall amount of the block grant may be determined in different ways; through negotiation, incrementally on a historical basis, or via a funding formula. The importance of these different elements in determining the overall amount of the block grant varies across the systems (Estermann, Bennetot Pruvot & Claeys-Kulik, 2013, p. 8).

Incremental funding, where historical allocations play a large role, is becoming less common, and in many systems, has already been replaced by formula-based approaches with input-oriented indicators. In 20 out of 34 European higher education systems, funding formulae were of very large importance in 2008, compared to 1995 when only seven systems attached a large importance to it (Jongbloed et al.,

[3] In most European higher education systems, the public funding of research takes place through a *dual support system* meaning that research is funded *both* through basic funding and through innovation-/profile-oriented funding (mainly competitive research grants allocated by intermediary allocated by research councils, national academies or other national/federal intermediary bodies (cf. Jongbloed et al., 2010, p. 53).

2010, p. 47–48).

Table 4: The importance of input- versus output-related drivers of HEIs operational grants

	Number of systems and relative importance of input-related drivers		Number of systems and relative importance of output-related drivers	
	1995	**2008**	**1995**	**2008**
Extremely important	38	24	3	8
Important	4	18	3	16
Minor importance or unimportant	3	3	39	21

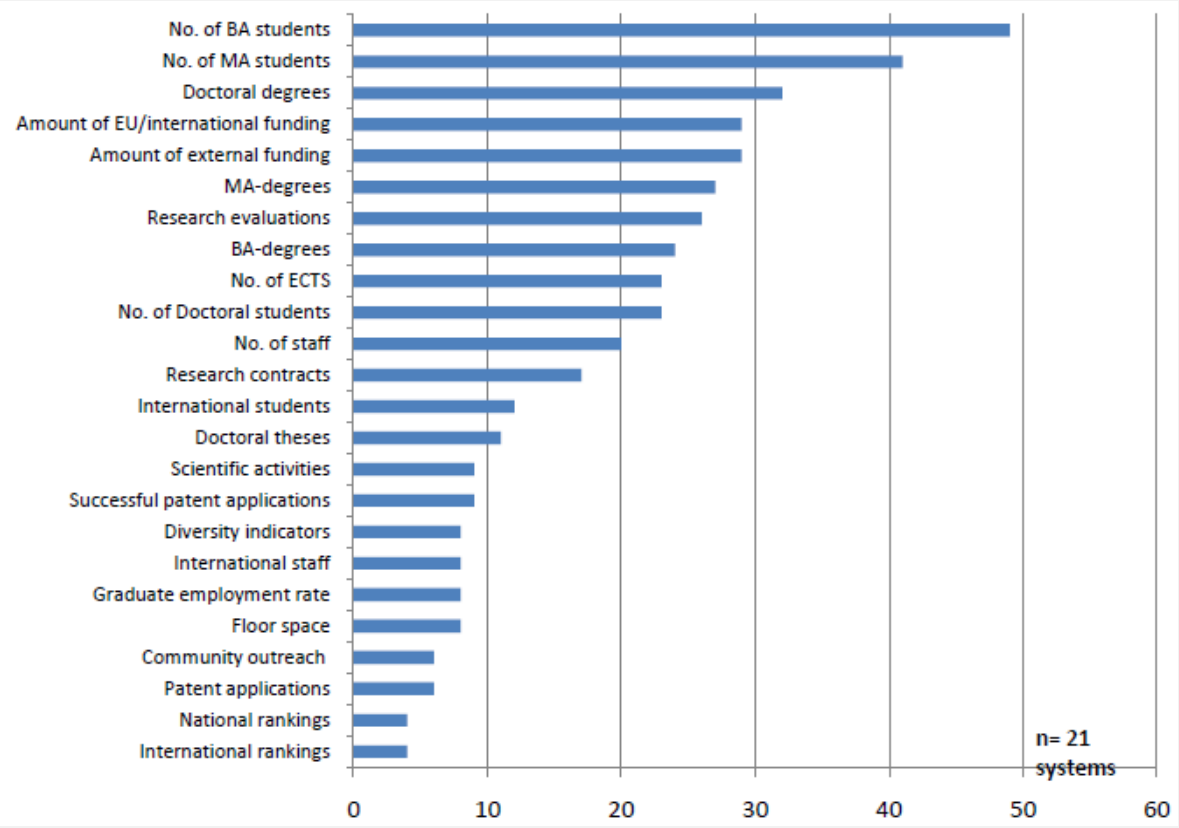
Source: Jongbloed et al., 2010, p. 51

The importance of input and output drivers in determining the operational grant for teaching, research and ongoing activity is shown in Table 4 above. Input-related drivers remain extremely important or important in almost all European higher education systems. The most important input criteria include the number of students or publicly-funded study places, the number of staff, and past costs of an institution. However, compared to 1995, when there were only 6 systems in which output-related criteria played an important or extremely important role, in 2008, 24 European systems considered output-related drivers important or extremely important. Frequently used output criteria include elements from teaching and research activities: degrees conferred, study credits accumulated, assessment results, indicators related to publications, or competitive research grants (Jongbloed et al., 2010, pp. 49–51). Where funding formulae are used to calculate the block grants, these are largely dominated by input-oriented indicators, namely student numbers (at Bachelor level, then at Master level). The corresponding output-oriented indicators (number of Bachelor and Master degrees conferred) are used less frequently or else have less weight in the formula (Estermann, Bennetot Pruvot & Claeys-Kulik, 2013, p. 9). Output-oriented indicators are typically part of the performance-based funding pillar, to be presented next.

The main purpose of *performance-based funding* is to create financial incentives for HEIs to produce outputs and outcomes in certain areas of their activities by applying formula funding[4]. Performance-based funding arrangements reward HEIs *ex post*—that is, they reward their past teaching and research performance (Ziegele, 2013, p. 74). Despite the simplicity in terms of definition, it seems that performance-based funding is understood very differently across Europe. Nevertheless, a majority of systems consider their funding allocation mechanisms at least partially performance-based for teaching (via graduate-related criteria) and partially or mainly performance-based for research, where indicators related to publications and external research funding are normally taken into account (see Figure 1).

[4] Or performance contracts which are related to part of the budget.

Figure 1: Relative importance of indicators used in funding formulae in European higher education systems



Source: Estermann, Bennetot Pruvot & Claeys-Kulik, 2013, p. 10

The third typical pillar of funding models, *innovation-/profile-oriented funding,* underscores intentions expected to be carried out in the future. Concretely, this type of funding is often utilized under the label of "targeted/earmarked funding", "competitive funding", "strategic funding", "project-based funding", "excellence initiatives" or "centers of excellence"—to name but a few. Regardless of the name, all these funding instruments basically aim to finance and incentivize innovations, research (or sometimes teaching) excellence, or the development of institutional profiles in advance (cf. Ziegele, 2013, pp. 73–74, p. 78). Innovation-/profile-oriented funding can take many forms, such as funding that is allocated on a competitive basis (e.g., the "Strategic Innovation Funding" in Ireland, established as a mechanism for institutional restructuring and modernization) or a non-competitive basis directly allocated to HEIs (e.g., Higher Education Innovation Funding scheme in the United Kingdom, which focuses on knowledge exchange). Innovation-/profile-oriented funding includes excellence initiatives (e.g., Germany's "Excellence Initiative"), as well as project funding programs for carrying out strategic research found in many European countries.[5]

Performance contracts (synonymous with target agreements, performance agreements), whereby

[5] See http://www.excellence-initiative.com/

certain goals are agreed between the funding authority and HEIs, are used in different ways within the funding pillars. With performance contracts, certain objectives, often in line with national strategic priorities and institution-specific missions, are agreed between the funding authority and HEIs. If performance contracts are connected to basic funding, they usually do not have to have a direct impact on funding. However, if the performance objectives are measured clearly and linked to financial incentives, performance contracts often become an organic part of performance-based funding arrangements[6]. Concretely, those performance contracts would be very broad, based on framework agreements, but might also take the form of more detailed contracts, highlighting specific and measurable objectives and targets (Jongbloed et al., 2010, p. 30). In this case, they would belong to the third, innovation/profile-oriented pillar. Over the recent years, performance contracts have become a common feature in many European higher education systems. Currently, performance-based contracts are in use in 15 out of 22 European systems. These contracts have a clear impact on funding allocations for instance in Finland, Austria, Germany and the Netherlands (Estermann, Bennetot Pruvot & Claeys-Kulik, 2013, p. 11).

When taking into account the latest developments of higher education funding models across Europe, some clear trends can be observed. First, it is likely that basic funding becomes more dynamic and demand-oriented (rather than supply-oriented) through the "money-follows-the-student" approach, where rewards and incentives are based more heavily on factors related to student enrolment, rather than on staff numbers or past institutional costs. Second, the relevance and weight of the performance-based funding, including the formula funding, is likely to increase. Performance-orientation sets HEIs incentives for improvement of quality and efficiency; both of which are crucial aspects in the increasingly competitive environment. Third, it is foreseeable that the relevance and weight of the innovation-/profile-oriented funding component increases especially in the form of competitive and targeted funding with a special emphasis on innovation and excellence, of which both are considered important prerequisites for regional or national competitiveness. Furthermore, it is likely that performance contracting becomes more widely used within the funding pillars due to the increasing performance-orientation in public funding modalities (Ziegele, 2013, pp. 74–79).

The responsibility for identifying the criteria was first assumed by the World Bank team, and then subjected to a feedback cycle with the MoES to ensure agreement. The criteria were derived from three different sources:

- International experiences and standards regarding the features of "good" funding models[7];
- Feedback and approval from the MoES; and
- Stakeholders' assessment of the importance of different criteria as obtained through interviews.

Whereas these criteria were applied to Latvia's current higher education funding model to determine its strengths and weaknesses in the World Bank's first report, **they have now become requirements or expectations vis-à-vis the proposed model.** Table 5 summarizes the intentions of each criterion.

[6] It is important to note that performance contracts are applicable to all three funding pillars (basic funding, performance-based funding, innovation-/profile-oriented funding) and not restricted to only performance-based funding arrangements.

[7] For a more comprehensive discussion, see first report (dated 18 March 2014).

Table 5: Overview of assessment criteria[8]

Strategic Orientation	Promote national strategies Promote institutional profiles
Incentive Orientation	Provide clear, non-fragmented incentives Avoid undesired effects Create performance rewards and sanctions Create a competitive environment
Sustainability	Guarantee continuity in funding mechanisms Allow long-term planning* Take into account cost differences Promote risk-spreading and management*
Legitimization	Provide unambiguous and balanced funding structures Make funding transparent Support the perception of fairness Allocate lump sums* Guarantee academic freedom
Autonomy and freedom	Implement an adequate level of regulation Guarantee autonomy of internal resource allocation* Promote accessibility of diverse income sources*
Practical feasibility	Use available data Ensure administrative efficiency Respect methodological standards Ensure coherence with funding levels and steering approaches

* Only relevant for institutions, not for student funding.

[8] Minor adjustments have been made in comparison to an earlier version of this table provided by the World Bank team in an 'Information Note' in July 2014.

4 Reforming the Funding Model for Latvian HEIs

This section provides an overview of the desirable elements and suggested features of a new funding model for Latvian higher education. The new model is evaluated to identify how it may address the current challenges of the existing model as well as vis-à-vis the aforementioned criteria for good funding models.

4.1 Funding models considered

In developing recommendations for Latvia's new approach to financing higher education, the team considered several alternative funding models and options. As discussed in Section 3 of the second report, a range of funding mechanisms and options have been taken into consideration for not only evaluating current funding practices in Latvian higher education, but also to provide realistic alternatives that help Latvia achieve its objectives (ibid.), such as enhanced quality of teaching and research, greater efficiency, access, and internationalization, and stimulate innovation, entrepreneurship and staff development.

As higher education challenges, objectives and practices differ from country to country, one cannot easily copy or import successful funding models from other systems and apply them in a system with different structures, traditions, challenges, objectives and interests. External options and models must be assessed against and adjusted to the local needs – as is intended to be the case in Latvia. Reforms should be informed by international experiences and adopt good practices that correspond to the specific situation, but they should not just copy something that is done abroad.

The range of funding approaches and instruments that inspired the team to select relevant funding options for the Latvian higher education system – including its challenges, ambitions and aims – includes various international practices with regard to the funding of teaching, research and students. Examples of state funding models to allocate resources among higher education institutions included funding formula that can be driven by the number of students, new entrants, graduates, internationally mobile students, research outputs, international staff, etc. Other approaches included ways of capacity funding with governments and institutions agreeing on how many students institutions will teach and how many graduates they will "produce" within specific disciplines and against what tariffs. Funding options that enhance sector efficiency include sector consolidation programs (as in Denmark) or performance agreements between national ministries and individual higher education institutions on various aspects of teaching and research such as quality, completion, drop out, institutional profiles, etc. (as in Germany, the Netherlands, Australia, Hong Kong, and New Zealand). Other funding approaches concern more performance and innovation stimulators such as excellence initiatives, research assessment exercises or targeted innovation funds.

In the area of student funding, not only the above mentioned tuition regimes were explored, but also the ways in which students are supported by grants and scholarships, and how many students benefit from them and based on what criteria – either need-based (depending on family income and resources)

or merit-based support (depending on the study achievements). Also various alternative loan schemes, including their eligibility criteria and repayment mechanisms, have been considered.

Various approaches have been explored with regard to resource diversification. In the area of teaching, one can think of whether to charge tuition fees or not and to whom. Related to the question of whether higher education ought to be considered a public or a private good – or a mixture of both and to what extent – the team has examined funding models where higher education is tuition free to all students (e.g., Estonia's new model under certain conditions[9]) as well as models where students have become the main source of teaching revenues (as in the English case of very high tuition fees accompanied by income-contingent loans). In the area of research, resource diversification is more often related to involving business and industry in research funding, which can be stimulated by specific funds based on public-private partnerships, innovation vouchers for companies, etc.

To summarize, Table 6 highlights many of the models explored as part of this study:

Table 6: "Good-Practice" models highlighted in the evaluation that address challenges similar to those in Latvia

State Funding	Netherlands' performance-based funding Sweden's capacity funding Finland's performance formula for universities Germany, Denmark, France's Excellence initiatives English Research Assessment Exercise Hong Kong, Netherlands, Australia, New Zealand, and Germany's use of target agreements Denmark's comprehensive sector consolidation
Resource Diversification	Various German states/ länder Netherlands' knowledge vouchers British universities recruitment of various disadvantaged students
Financial Autonomy	Germany's consolidation process in Lower-Saxony Promote institutional profiles
Student Funding	Netherlands' performance-related grants Estonia's student loans German BAFöG loans German Bundesausbildungsförderungsgesetz (BaFöG), the English National Scholarships Programme, the Dutch Supplementary grants, the Australian

[9] It is free for students who complete the required 60 ECTS per year/30 ECTS per semester.

	Commonwealth Grants Scheme and the New Zealand Student Allowance Scheme (need-based grants)

Finally, the issue of whether higher education is a public or private good has been heavily debated in Latvia. Below, an excerpt from an earlier report for this project has been provided to re-iterate the World Bank team's perspective, to contextualize the other models considered, and to preface the proposed model:

Box 4: Higher education as public and private good

From an economic perspective, HEIs produce outputs that can be categorized as "public" or "private" goods. Using a standard economic definition, public goods (e.g., products, services) are goods that are non-excludable and non-rivalrous. Non-excludability means that a good cannot be provided exclusively to only some individuals in a way that other individuals could be excluded from consuming the same good. This, therefore, implies that consumption by some individuals does not diminish the consumption levels of others of the same good. In the case of private goods, the situation is the opposite; individuals can be excluded from consuming the service or product if they are not willing or able to pay for it (i.e., a good is excludable), and consumption of a service or product reduces the possibilities of others to consume the same good or service (i.e., a good is rivalrous). In addition, public goods create spillover effects. If they are being offered, people who do not purchase the goods nevertheless enjoy their benefits, e.g., dikes that are used to protect from water floods, etc. A public good has to be provided by the state and funded by taxes, as private markets would not lead to a sufficient provision of the good. A private good does not require state intervention and should be provided by the market.

The public vs. private good argument regarding higher education is an explanation for the diverse tuition fee developments in Europe. In many European countries, politicians tend to "buy" either one of the two positions, often leading to a politically polarized debate where the two positions are opposed in contradiction, leading either to political reform blockades or to an unreliable sequence of introducing and later abolishing tuition fees.

This paper proposes economic analysis and rational arguments to overcome the political impasse. Economists have been clear that there are private benefits to be gained from higher education, meaning that there is rivalry and excludability. But, they are also convinced that there are public benefits of higher education (see Table 7). Public benefits refer to positive externalities of the good, i.e., benefits for society not taken into account in the individual cost-benefit-analysis of the student (hence justifying public funding).

Table 7: Potential private and public benefits from higher education

Benefits from higher education	Private	Public
Economic	Higher salaries	Greater national productivity and development

	Employment	Reduced reliance on public support
	Higher savings	Increased consumption
	Improved working conditions	Increased potential for transformation from low-skill industrial to knowledge-based economy
	Personal and professional mobility	
Social	Improved quality of life	Nation-building and development of leadership
	Better decision-making skills	Democratic participation; increased consensus; perception that society is based on fairness and opportunity for all citizens
	Improved personal status	Social mobility
	Increased educational opportunities	Greater social cohesion and reduced crime rates
	Healthier lifestyle and higher life expectancy	Improved health
		Improved primary and secondary education

Source: Steier, 2003, p. 167

Higher education has elements of both private and public goods. People can be excluded from higher education, from a particular institution, from a particular program, or from a particular teacher. This exclusion can be based, for example, on differences in academic merit; i.e., given that an individual has to meet certain conditions in order to have access to, and to graduate from, higher education institutions. However, nobody can be excluded from the higher productivity graduates exhibit at the labor market and the advancements made through their creativity and application of skills after successfully completing quality higher education. There is also wide agreement that higher education creates both public and private benefits as well as costs, and that those who benefit from higher education should also contribute to its costs (equity principle). Higher education creates multiple social and economic public benefits thereby justifying significant public investments in higher education. However, individuals (mainly graduates) also receive significant private economic and social benefits, making the recommendation that they bear directly at least part of the costs of their training, both efficient and equitable.

Economic rationales provide no arguments for 100 percent public or private funding. Differences in opinion nevertheless arise when determining what the “right” balance might be between benefits and costs and on how to measure up the benefits and costs (especially in terms of money). In any case, several scholars consider the full public-funding model of higher education as inequitable and regressive, based on the fact that higher education students are disproportionately from middle- and higher-income families (e.g., Barr, 2004; Bevc & Uršič, 2008; Johnstone & Marcucci, 2010).

OECD’s statistical yearbook Education at a Glance provides calculations annually on the public and private costs and benefits of higher education. According to OECD (2013, p. 135), it is very difficult to

generate correct and comprehensive estimates of public and private returns, meaning that rates of return must always be interpreted with caution. Nevertheless, large discrepancies between private and public returns "should prompt additional analysis to assess whether government tax schemes or subsidies are strongly distortionary" (ibid., p. 135). Based on OECD calculations, average net private returns in EU21 countries slightly exceed public returns (ibid., pp. 144–147). However, in some specific countries (Estonia, Turkey, Poland, Slovakia) private returns are considerably higher than public returns. On the other hand, e.g. in Belgium, Greece and Italy public returns are moderately higher than the private ones.

This leads to the following conclusions:

- Higher education is a "mixed good" creating both public and private costs and benefits.
- Determining the exact public and private costs and benefits is difficult from a conceptual and methodological perspective. However, one-sided financing models emphasizing only public or only private dimensions (full public or full private funding) are neither adequate nor equitable.
- Since the real balance between private and public costs and benefits is unclear, there is a wide range of potential arrangements between private and public funding that might be considered when developing an appropriate financing model. However, neither a pure market model nor a 100 percent free higher education model is within this range.

In the case of Latvia, the first conclusion would be that economic analysis provides no basis for the polarized political discussions of the previous years, favoring either the argument of the pure private or public good. Acknowledging economic arguments might help in avoiding political reform blockades. Secondly, if we take the mixed good approach to the individual level, the dual track model seems to be problematic. Each student benefits from private returns and contributes to positive externalities. The economic rationale would instead suggest a certain cost-sharing for each student rather than an overall cost-sharing for all students combined. Third, the major question for Latvia will be where to move from the current situation: towards greater private or public funding shares (or might the current situation be adequate)? The status quo section analysis where public and private funding in Latvia stand in comparison to other European countries, and concludes that, at present, total societal investment in higher education is too low due to both limited public funding for HE and R&D, as well as limited private contributions, particularly in the R&D sector. Private contributions through tuition fees tend to typically come from students who cannot attend HE on subsidized study places, and have to pay the full costs. Analysis shows that it is in particular students from more advantageous backgrounds that profit from the subsidized (tuition-free) study places.

Overall, examining the current funding situation in Latvian higher education, the team is convinced that Latvian higher education demonstrates characteristics of both public and private goods, which should one way or another be reflected in the funding model and its policy implications. The team believes that any policy recommendations for a new funding model will have to bring about a major change in the way Latvia funds its higher education system, institutions, and students in order to bring about stability as well as a stronger orientation towards quality, performance, efficiency and equity. In the section that follows, the team proposes a new model that contains various elements of the current

Latvian funding model combined with elements that are being used elsewhere and are attuned to the Latvian context, reality and feasibility. Although stability is an important feature of any funding model, the team encourages Latvia to periodically assess its funding model to reflect evolving fiscal circumstances, policy priorities, and cultural perspectives.

4.2 Positioning Latvia within European Trends

Positioning the Latvian financing model within the context of European trends in higher education provides additional context for the evaluation. Importantly, it should be noted that the team does not consider European trends to be the main criteria to evaluate the strengths and weaknesses of Latvian financing model. What seems to be popular or good in Europe does not automatically mean that it would be applicable or good for Latvian higher education financing. Funding models are tightly bound to the features (society, economy, demographics, etc.) of different countries, and it is acknowledged that Latvia differs in these features with many respects.

The following tables in Box 5 (Tables 8 to 12) are excerpted from the World Bank team's first report and offer an overview of Latvia's position vis-à-vis European trends:

Box 5: Latvia's position vis-à-vis European trends

Table 8: Models of public funding – European trends and Latvia

MODELS OF PUBLIC FUNDING	European trend	Current situation in Latvia	Position of Latvia
Structure of funding model	• **Three** typical **pillars** for allocating **public funding** for HEIs can be found from most of the European countries: **(1) basic funding;** **(2) performance funding**; and **(3) innovation-/profile-oriented funding** • **Performance contracts / target agreements** are in use in 15 out of 22 European	• Latvia applies only the pillar of "**basic funding**" in allocation of core public funding to HEIs • Performance contracts are applied between HEIs and MoES	**Inconsistent** with European trend
Basic funding and performance-based funding : modalities	• **Basic funding: Formula-based** approaches with demand-based **input**-oriented indicators are substituting **incremental funding** with **historical** emphasis (mixed approach is common) • **Performance-based funding:** Majority of systems consider their funding allocation	• Latvia applies **formula funding** mainly with **input-oriented** indicators (funded study places, research equipment) • The overall public budget of the HEIs remains largely constant and develops **incrementally** on a **historical basis** (rather than demand) • Current funding model does not	**Inconsistent / consistent with** European trend

	mechanisms at least partially performance-based • In 2008, 24 European systems considered output-related drivers important or extremely important (in 1995: 6 systems)	offer **significant incentives** for greater **performance-** and **output-orientation**	
Innovation-/profile oriented funding: modalities	• **Innovation-/profile-oriented funding** is used more frequently to support national policy priorities and development of institutional profiles • The relevance and weight of the innovation-/profile-oriented funding component is likely to increase; especially in the form of competitive and targeted funding	• The innovation-/profile-oriented funding component in Latvia is currently composed of a number of different types of smaller and larger **third-party funding streams** (including EU Structural Funds) but **not included** in the system of state funding	**Inconsistent with** European trend

Table 9: Resource diversification – European trends and Latvia

RESOURCE DIVERSI-FICATION	European trend	Current situation in Latvia	Position of Latvia
Public / private funding diversity	• **Private expenditure** on HEIs has **increased** in 16 out of the 19 European OECD countries between 2000 and 2010 • **EU21 average** of private expenditure on HEIs was **23%** in 2010	• Private funds (tuition) accounted total **23%** and "other funds" (excluding international/EU funding) **20%** of Latvian HEI revenue in 2012 (Source: MoES, 2014)	**Consistent** with / **ahead** of European trend
Diversity of sources	• Funding of European public HEIs in 2008: -**67%** from **public sources** through operational grants (in 1995: 78%) -**12%** from **private households as tuition fees** (in 1995: 8%) -**21%** as **third-party funds** (in 1995: 15%) • On average, **EU funding** ranges from **3-4%** (EUA 2011) to **over 10%** (EUA 2013) of the total income of HEIs	• Latvian HEIs funding structure on average (2012): **-36% state budget** funding **-23% tuition fees** **-41% "other sources"** (out of which 21% were from international funding, mainly EU Structural Funds) (Source: MoES, 2014)	**Inconsistent** with / **ahead** of European trend

Table 10: Financial autonomy – European trends and Latvia

FINANCIAL AUTONOMY	European trend	Current situation in Latvia	Position of Latvia

HEIs freedom in internal allocation of public funding	• Block grants are used in 25 systems, line-item budgets in 3 systems • No restrictions on the internal allocation of the block grant in 14 systems • Some restrictions for internal allocations of the block grant in 11 systems	• One-year **block grant** split into sub-categories	**Consistent** with European trend
HEIs ability to keep a surplus	• HEIs are able to keep a surplus in 27 systems, not able to keep in 4 systems • No restrictions in keeping a surplus in 15 systems • Some restrictions in keeping a surplus in 12 systems	• State funded HEIs **can keep a surplus** with an approval of external authority	**Consistent** with European trend
HEIs ability to borrow money	• HEIs are able to borrow money from financial markets in 23 systems, not able to borrow in 7 systems • No restrictions for borrowing in 7 systems • Some restrictions for borrowing in 16 systems	• Latvian HEIs **are able borrow money** with an approval of external authority	**Consistent** with European trend
HEIs ability to own their buildings	• HEIs are able to own their buildings in 22 systems, not able to own in 6 systems • No restrictions in selling assets in 8 systems • Some restrictions in selling assets in 14 systems	• Latvian HEIs **own** their buildings • Latvian HEIs **can sell** their buildings (restrictions apply in the case of State property)	**Consistent** with / **ahead** of European trend
HEIs ability to set the salaries of their staff	• HEIs are not able to set salaries freely in 28 systems, salaries can be set freely in 5 systems	• Latvian HEIs **are free** to set the salaries of their staff (above the minimum wage)	**Ahead** of European trend
HEIs ability to set the level of tuition fees	• In most European systems, HEIs ability to set the level of tuition fees is restricted by the external authority, especially in the case of domestic/EU students.	• Latvian HEIs **are able** to set their fees at all levels	**Ahead** of European trend
Overview on financial autonomy	• The overall level of financial autonomy across Europe has increased significantly over the last 15–20 years	• HEIs have **a high level** of financial autonomy, Latvia was ranked 4th position in EUA's "University Autonomy Scorecard"	**Ahead** of European trend

Table 11: Student funding – European trends and Latvia

STUDENT FUNDING	European trend	Current situation in Latvia	Position of Latvia

Tuition fees / fees	• **A large diversity** of fee systems, no clear European trend • **Majority of students pay fees** in 28 systems, minority of students pay fees in 13 systems (2009/10) • During the past years, some systems have abolished fees, whereas some systems have introduced fees or raised the level of fees	• Latvia applies a **dual track tuition fee** system • **49% of all students** (full-time and part-time) **pay fees** (37% of full-time and 97% of part-time students) (Source: MoES, 2013) • Compared to many other European systems, **relatively high fees** are charged in Latvian HEIs	No clear European trend
Student support	• **A large diversity** of student support systems, no clear European trend • **Need-based grants** are most frequently used in European higher education systems, but still 20 out of 39 European systems still apply also **merit-based** schemes • Publically-supported student loan systems exist in 2/3 of European countries	• Latvian higher education system offers mainly **merit-based** support in the form of **state funded study places**, and relies more on government-subsidized, **mortgage-style loans** offered by commercial banks, rather than grants	No clear European trend

Table 12: Overview – European trends and position of Latvia

European trend	Position of Latvia
Models of public funding	Inconsistent with European trend
Resource diversification	Mixed
Financial autonomy	Ahead of European trend
Student support	No clear European trend

4.3 The Proposed Model

Importantly, a new funding model could help to overcome the political blockades caused by the public versus private good debate and the current underfunding of higher education in Latvia. As higher education is a mixed good with public and private benefits, it needs mixed funding.

It is clear, however, that the current level of funding, both public and private, for higher education in Latvia is not sufficient. This is illustrated by the significant gap between overall spending on higher

education in Latvia vis-à-vis other EU countries.[10] Consequently, the government considers increasing its higher education expenditure. Private sector investments in higher education are also relatively low – except for the tuition contributions from part-time and full fee-paying students on non-state-funded study places. It is not clear how fast the current situation could be changed (see the subsequent section that addresses different funding level scenarios), but it is evident that proposals for a new funding system must acknowledge that the current system is substantially underfunded.

The capacity to improve the system and to realize the potential benefits of a new model are directly related to funding levels. Increased government expenditure would not only serve as an example to stimulate increased private (business) funding but could also include incentives to help private partners to invest in higher education and research. The task would then be to increase public funding in connection with the implementation of new funding components and private funding through further diversification with an emphasis on sources such as small and medium enterprises and industry, research funds, etc. In the proposed model, the overall income stemming from tuition fees would not be expected to rise in the medium term; however, tuition fees would be 'generalized' as an important element of a more egalitarian system with a sufficient funding basis.

Taking this approach, however, would be a political decision which is independent of the main emphasis on a changing nature of the allocation of public funding. **The team would advise the government and sector leaders to include political economy considerations in its further exchange on the model and its possible implementation**.

Considerations of higher education funding levels in Latvia should not be mixed with the funding levels of the education system as a whole; i.e., a potential funding increase related to lower levels of education would most likely not resolve the quality and performance issues which the tertiary sector faces and which were discussed in earlier reports.

Funding increases should not be realized without changing the system. It is difficult to argue for a larger investment in a suboptimal structure; on the contrary, the potential for additional funds is greater if it is clear how these funds will add value to the system and advance policy objectives. Greater transparency in the way higher education is funded and is related to improvements of the quality of education and research will add to the willingness of various stakeholders to invest, so that the envisaged added value of higher education and research will not only be realized but also demonstrated.

An important feature of the recommended funding model for Latvia is "balance." Balance must be achieved in many areas to present a foundation for successful reform, including:

- A balance between stability and incentives;
- A balance between input- and output-orientation;
- A balance between ex ante funding of innovations and ex post rewards of performance;
- A balance between the promotion of national objectives and institutional profiles;

[10] "In 2010 (most recent data), public expenditure on higher education represented only 0.8 percent of GDP in Latvia, versus an average of 1.26 percent in the EU27 countries and 1.23–1.27 percent in Estonia and Lithuania respectively" (see first report and this final report, Box 1).

- A balance between teaching and research as criteria of funding (plus an alignment of both in the funding model);
- A balance between basic across-the-board funding of research and focused, prioritized funding of (excellent) research;
- A balance between public and private sources of funding;
- A balance between need-based and merit-based student funding;
- A balance between accountability and autonomy.

As became clear in the first report within this World Bank Advisory Service, such a balanced approach does not exist at the moment but could result from the features of a new model which are discussed in this section.

Some of the recommendations are closely related, while others do not depend on each other. The following paragraphs give a number of recommendations. In some cases, recommendations only make sense if they are combined. In other cases, it would be worthwhile to realize one recommendation even if another cannot be realized at the same time. Important aspects include the following:

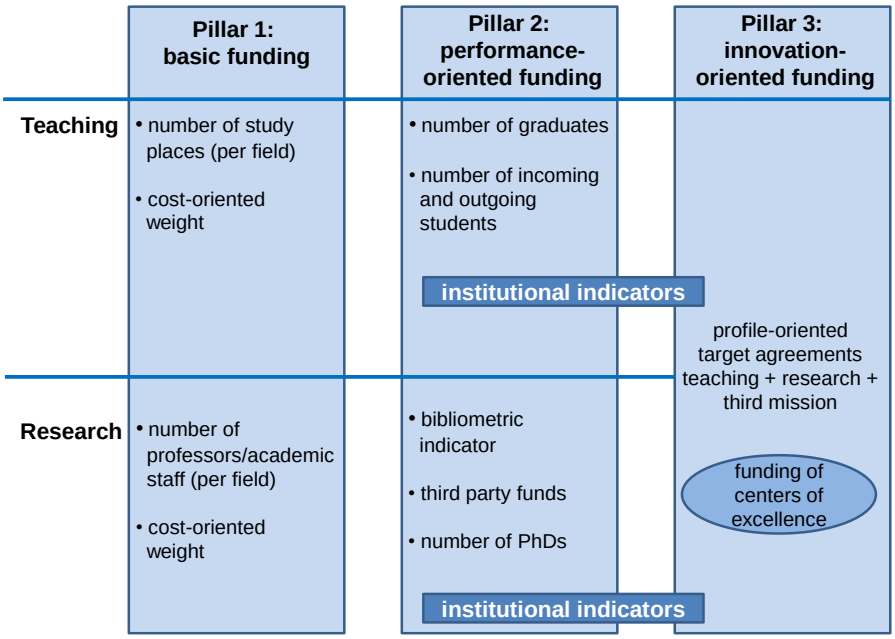
- The implementation of a new state funding model could be done without reforming the student funding system at the same time (and the other way round).
- Within the state funding model a combination of all pillars is desirable, but new pillars could be implemented one after the other.
- A general tuition fee model (and even the existing tuition fee model) definitely has to be linked to the proposed reforms in need-based student support and student loans. However, it can be organized separately from a new state funding model (including its various pillars).

State funding would benefit from a three-pillar model. In such a model, stable funding is combined with a performance-oriented component, using a formula with performance indicators, and an innovation-oriented component allocated via performance agreements.[11] The performance part rewards and sanctions past performance (ex post funding), whereas the innovation-oriented component provides financial support for the attainment of future objectives determined by a negotiation between individual universities and the ministry (taking into account state goals and institutional profiles). This also means that performance measurement and performance agreements are no longer bound to the study place model but constitute separate elements of the state funding model. Since teaching and research are partially separate but also interrelated activities, the funding mechanisms should reflect this with both separate and aligned approaches. There is, however, one multi-component public funding model which aligns teaching and research-oriented allocation criteria.

The basic features of the three-pillar model for Latvia are described below; Figure 2 provides an overview.

Figure 2: Three-pillar model of state funding

[11] A performance agreement is a contractual arrangement between the MoES and a single university, defining clear and measurable goals of the university for a multi-year period within the framework of national objectives. In return to the obligation to attain the goals, the state provides funding. The agreement results from a structured negotiation process. For details, see Appendix 1.



The first pillar would mainly consist of the study place model. The study place model with its input-oriented planning approach remains an important element of the state funding system, since it continues to create a stable funding base. In the new model, however, the study place allocation is not intended to be the only component to cover the cost of the educational experience. Unlike the current model, the institutions would be intentionally expected to cover the cost of teaching and research from all sources of the three-pillar model, whereas the study place model is limited to the function of basic funding. With possible additional funding allocated through pillars 2 and 3, the level of overall public funding allocated through the model could come closer or correspond to the budget that would result from the currently envisaged "optimal price" of a study place.

The ministry would still conduct periodic studies on the costs of delivering discipline-specific educational programs, but the intention is to understand the relationship among different areas of study as opposed to the precise cost. The relative cost relationship across different programs is then employed in the funding model as three to five different funding or tariff bands (e.g., social sciences and humanities, science and engineering, medical programs, arts – which would mean a simplification of the current cost coefficients). If it is determined that programs in science and engineering, for example, cost approximately 1.5 times more than those in the social sciences, then the amount allocated for a study place in science and engineering would be 1.5 times the amount for a study place in the social sciences.

Keeping in place the study place model is predominantly meant to guarantee some base-level funding. Unlike in the current funding model, it is not the objective of the new study place model to provide an exact representation of the precise costs per student or some proportion of that (currently HEIs only receive around 80 percent of the "defined minimum costs of a study place"). The "new" study place model, however, is meant to provide stability within the overall system. The relationship to the politically decided number of study places indicates the socially desired balance between disciplines.

This is the function of the first pillar. This tranche of funding should be topped up with the other funding elements, such as the performance-based second pillar and profile- and target-oriented third pillar funding. Thus, keeping the first pillar funding as a basic financial foundation of the system allows for space in the public budget to also allocate performance- and profile-oriented funding at levels that will create real incentives within the system. Performance-oriented allocation implies that a university with high performance will have more state funds available per student than a low performing one.

The study place model must become less complex and more transparent, flexible, and strategic. The process to determine the number of study places should be optimized. A revised study place system would work in the following way:

- The ministry plans the overall numbers for study places in different disciplines. The immediate emphasis is on the upcoming year, but a multi-year outlook is provided as guidance to institutions, students, and stakeholders. This plan is informed by stakeholder consultations (especially regarding employer needs), labor market forecasts, and data on the development of real demand. The overall target numbers for fields for the Latvian system would be published. This results in an incremental change from the plan's starting point, which would be the current number of study places per field and institution. From this starting point certain overall increases and decreases per field are planned, and a certain percentage of the study places could be used for innovative programs suggested by the institutions. Reallocations of study places between universities are possible (putting an end to the practice of generating funds for new study places only from existing ones in the same institution).
- The ministry makes an offer to each university, as part of the annual communications around the performance agreement, mentioning the planned increases and decreases per field and inviting the institution to offer places in new programs. The university develops a proposal, and the ministry makes a final decision based on the available budget and quality of the proposal. For added transparency, the Higher Education Council or an independent panel (MoES representatives, institutional representatives, employers with international experts) may serve in an advisory role when new study places are allocated. Through these proposals, the universities compete with their best arguments for additional places or to establish new innovative programs. The private universities could take part in this competition for the pool of innovation-related study places, so they have an equal chance to gain study places with curriculum innovations (however, private institutions will not become a full part of the public system, as they are not subject to the overall study place planning and funding but could only get public funding for innovative programs). Each university could decide whether to offer full-time or part-time study places; a part-time place would be apportioned based on a student's progress towards degree (e.g., rewarded with 50 percent, assuming that half-time studies are a feasible model). There is no in-period micromanagement of study places by the ministry.
- The amount allocated per study place in each discipline or field (e.g., social science, medicine, etc.) is based on the costing relationship among the study fields (i.e., cost coefficients described earlier) and on the available budget for study places (basic funding). Their relationship is analyzed and, if necessary, updated based on studies of the current cost structures in HEIs.

- As long as the real number of students per field and per year does not fall below or exceed a certain amount of the study places planned (e.g., +/- 5 percent), there is no reaction by the state. If these thresholds are reached, this will have an impact on the ministry's offer for the next period (by a negotiated adaptation of study places to demand).
- Periodically, the ministry will conduct a review of the study places in a specific field (e.g., every three to five years and if needed). So the incremental approach per field would be questioned from time to time and the review could lead to broader reallocations. The review could use criteria such as proposed cost of programs, qualifications of academic staff, employment rates upon graduation, research activities, employer partnerships, student satisfaction, etc.
- The current system with different line ministries involved will either be integrated or be replaced with a mechanism in which the funding incentives and levels are more closely related for institutions that have similar programs.[12] The aim here is to create a more level playing field for teaching and research throughout the system. This requires a process of inter-ministerial collaboration and adjustments that needs to be addressed by an inter-ministerial committee.

The first pillar also includes a per-capita funding component per number of professors or academic staff to enhance the available basic funding and to align teaching and research funding. The current basic research funding for those research institutes operating inside universities should be discontinued, as it restricts the university's potential to use research funds flexibly and, according to the recent research evaluation, does not guarantee that research funds are allocated to real centers of excellence. Therefore, some basic research funding should be integrated into the first pillar by a per-capita premium per professor or academic staff (which of course does not mean that the money goes directly to the individual, as it should be used within the university strategically to promote publications or other agreed research outputs, allow networking in research, etc.).[13] Institutions themselves can decide how these funds are allocated among their different faculties, departments and individual academics, but preferably stimulating focus and mass that enhance research quality and (international) competitiveness. As in most higher education institutions worldwide, some academics have more teaching intensity, while others have stronger research intensity, often in relation to personal capacities and preferences. Similar to the study place model, there could be a weight according to the relative cost situation in different disciplinary clusters. The per-capita funding that respects current organizational size guarantees that institutions can gradually grow into a new situation in which performance- and innovation-based funding become more important. As such, research funding follows a multi-faceted approach: a) widely available basic funds to strengthen the autonomous use of funds by the universities (as described above), b) through the use of agreed upon research-related performance metrics (as referenced with the second pillar, and c) targeted investments in a few innovative centers of excellence (related to the third pillar).

[12] However, the proposed model may not be directly applicable to some specialized institutions operating under a distinct institutional model and/or jurisdiction, like those subordinate to the Ministry of Defence.

[13] "Academic staff" can include both teaching staff (such as associate professors, docents, lecturers, assistants) as well as research staff (such as leading scientists, scientists, research assistants).

The second, performance-oriented pillar contains a small number of indicators derived from national strategies and of general relevance for all HEIs. The budget reserved for formula allocations and the percentage that each indicator takes from that sum are defined. The indicators are measured for all institutions and the available budget per indicator is distributed according to the share of an individual institution related to the overall system performance. For instance, if a university "produces" 10 percent of the graduates, it will receive 10 percent of the budget allocated by numbers of graduates. The ministry also has the option of implementing some weighting on graduates in certain disciplines (e.g., science and engineering graduates could be weighted higher than social science graduates). In addition, the allocation can be smoothed by assessing three-year averages rather than annual fluctuations.

Latvia's policy objectives[14] suggest a variety of output-driven performance metrics that could be part of a formula. The following indicators with across-the-board relevance for universities are worth considering (but subsequently require a political decision concerning priorities):

- Number of graduates. This is complementary to study places and addresses output. It creates incentives to minimize drop-outs (or to induce inevitable drop-outs early) and to limit time to degree.
- Number of PhDs, to stimulate PhD "production".
- Number of incoming and outgoing mobile students (and possibly academic staff), to address the internationalization objective.
- A bibliometric indicator, to stimulate dissemination of research findings. An amount allocated via such a research-related indicator may help ensure that basic research funding rewards output and performance and does not favor large institutions over smaller ones in terms of the number of academic staff. Again, the model will create a balanced approach between performance orientation and stability.
- Third-party funding of research and teaching, to reward and stimulate the generation of external income. A higher weight for funds from European sources could be considered, given the assumption that there is a high preference for that kind of financial revenues.

The weights between the different indicators would be decided by the ministry according to policy preferences. A balanced representation of teaching and research indicators is being recommended. The Higher Education Council could be involved in this decision. If the plans for comprehensive alumni surveys/tracer studies are realized, an employment-oriented indicator could be added.

Part of the allocation under the second pillar is reserved for institutional performance indicators which are university-specific and related to the profile and strategic development of the institution. One of the political objectives is to strengthen and even diversify the profiles of HEIs in Latvia. For instance, there are some universities with a research focus, and there are others with more focus on knowledge transfer or regional engagement. Similarly, internationalization does not play the same role for every institution. This leads to a situation where specific performance criteria do not have equal importance for every institution. Innovation, smart specialization and knowledge transfer are highly relevant areas where objectives should be set and rewarded, but not in the same way for every university. If the ministry wants to promote internships in industry, this is also not of equal importance

[14] For details, see second report under this Advisory Service.

for every field and HEI. To take all this into account, the formula should contain an element with institutional performance indicators (specific for each university and agreed upon in the performance agreement). The individual indicators represent major national strategic objectives. An institution could have up to three specific indicators with university-specific weights. This part of the formula needs a different algorithm: as the indicators per institution differ, a formula is needed that makes the outcomes comparable and the distribution calculable. This could be done by analyzing the progress made in reaching the goals (measured by percentage of change in individual indicators and comparing the percentages between the universities). The negotiation of institution-specific indicators and weighting allow the sector to diversify in meaningful ways that are consistent with the ministry's policy objectives. If an institution wanted to pursue an alternative direction, then the institutional autonomy would still allow that to happen albeit without public funding.

The third, innovation-oriented pillar provides funding for activities that contribute to targets set in a university performance agreement. The targets would take into account national priorities and operationalize university profiles and strategies. The contract between the ministry and each university would be renewed every three years. This performance agreement (which is different from what now exists in Latvia as a contractual arrangement) refers to national goals and the university strategy and defines a limited set of priorities for the university in the coming three years. Whereas the performance-oriented (pillar 2) component of the performance agreement is focused on selecting a few relevant indicators that are specific to the institution's mission, the third pillar is assessing more broadly how the institution will contribute strategically to Latvia's higher education vision, mission, and objectives. The second pillar provides ex post rewards, while the innovation fund (pillar 3) supports future plans by ex ante support. The priorities must naturally address teaching and research, but they should also extend to all kinds of third mission and knowledge transfer activities. The performance agreement also defines innovative measures to be taken to achieve these goals if there is a need for pre-funding of actions. This funding comes from a pool of money and is defined per action. The indicators to measure success regarding the priority areas are defined in the performance agreement (and used in the second pillar as mentioned above). The performance agreements follow a standard format discussed between ministry and universities and subsequently defined by the ministry (Annex 1.B shows a proposal for this format). National goals could also be integrated by mentioning some state priorities for actions to be taken.

Activities aimed at the longer-term development of university profiles are represented in the third pillar of state funding rather than in the allocation of EU Structural Funds.[15] The current use of Structural Funds does not always reflect a secure, sustainable, long-term perspective on funding. It is, therefore, important to get long-term goals and developments into the "normal" funding model or annual operating budget. Through integration in the performance agreements, there is a periodic assessment of success every three years, but a longer-term perspective for renewal is possible. Looking at current strategic goals, there is a strong emphasis on the establishment of joint doctoral schools with non-university research institutions, post doc programs and the international accreditation of study programs. These developments should become elements of the performance agreements. The ministry

[15] Though EU Structural Funds could potentially be used to kick off this pillar.

announces that these aspects will be among the prioritized activities, and the universities then take this into account when drafting performance agreements.

The third pillar also contains the funding of research centers of excellence, taking into account research evaluation outcomes and a national strategy for research priorities. As noted above, the funding of research institutes is replaced by widespread per-capita-funding. This research component would be part of the university's lump sum allocation and combined with focused funding for a limited number of specific research units (i.e., centers of excellence) with the capability to generate internationally competitive research outcomes. The latter is included in the performance agreement. The ministry in consultation with key stakeholders defines the criteria for the centers of excellence, the universities prepare proposals, and a peer review supports the selection process (the results of the recent research evaluation could be used in the first round). It is possible (or even promoted) to have cooperative centers of several universities or universities and research institutes. Due to some similarities between the proposed centers of excellence and the former "State Research Program," it is advisable that the experiences of the "State Research Program" be taken into account in the context of the development process of centers of excellence. Together with EU Structural Funds, business and industry funds could support the development of pillar 3.

EU Structural Funds continue to help modernize the higher education and research sector and also focus on short-term change processes and the diversification of funding sources. A parallel debate is underway in Latvia on the appropriate use of EU Structural Funds in the higher education and research sector. It is recommended that the incentives set through Structural Funds align with those in the new funding model for higher education and research, such as to stimulate quality, improve performance and attract young research talent. As Structural Funds generally have a temporary and short-term character, these funds can particularly support important immediate changes, such as the following:

- Incentivize the generation of other income streams. Resource diversification beyond tuition fees and the EU Structural Funds is a key to the sustainable financial development of the higher education and research sector in Latvia.
- The implementation of "knowledge vouchers" (according to the Dutch system) that allow small and medium enterprises to finance cooperation with universities, thus stimulating viable university-industry relations.
- The set-up of a sector consolidation incentive program to create economies of scale and scope through voluntary strategic cooperation or mergers between programs and/or institutions, and to create quality and critical mass by linking with societal partners (similar to the process in Denmark which was not centrally planned).

There is no need to change the rules of financial autonomy, but more transparency would be beneficial. Financial autonomy in Latvia is ahead of broad European developments. There is no need to change the existing regulations. However, financial autonomy and transparency of funding are two sides of the same coin. Universities have to publish an annual financial statement of revenues and expenditures and, for example, avoid declaring major parts of the revenues as "other." Transparency is the basis for trust in the capabilities to deal with financial autonomy. Another element of transparency is annual reports addressing progress against the performance agreements.

Decision-makers at some institutions should be encouraged to make more use of the financial autonomy they have. To reap the benefits of financial discretion, university managers have to be highly qualified in planning, budgeting, and financial management. To ensure this, several actions are recommended: training and capacity-building activities in financial management need to be provided to clarify and illustrate the potential of financial steering and planning, and examples of good practices (or of problems) need to be shared so that all institutions become aware of their opportunities and limitations, for example, by benchmarking financial strategies. The profound experiences with financial management in the higher education institutions are a good basis to implement peer learning activities.

Tuition fees are likely to remain part of the Latvian higher education funding system. However, the current approach to tuition fees needs to be reconsidered. Instead of the dual track system there could be a more general cost-sharing model. On the one hand, to avoid the current socially selective effects, the number of (partially) state-subsidized study places would be enlarged (to an amount around the current total number of students). On the other hand, as a general principle, all students have to pay a share of the cost of their study place. The state could set the shares per discipline together with the numbers of study places. The shares could be differentiated according to cost or labor market perspective of the field, or according to policy preferences (for example, lower tuition fees for STEM in order to make such fields more attractive to students). This general principle secures the income stream from tuition fees – which currently is shrinking due to demographic developments – and reduces social selection (in combination with the following recommendations on student funding). However, if the revenue from tuition fees were to remain stable compared to the current situation, then more students would pay lower tuition fees.

Means-tested or need-based financial support can widen access and address equity concerns. The current practice of having scholarships fund only the very best students would be discontinued, and merit-based considerations become a second-order criterion. Students from disadvantaged social backgrounds/low income families would be eligible for a scholarship to refinance the private cost share. The continuation of such a scholarship would be decided every year based on the performance of the student (e.g., completion of modules/ECTS or grant turns into a loan). The transition from a mainly merit-based to a mainly need-based system may require a stronger centrally organized system that can better assess financial need (e.g., based on parental income). Need-based elements require a mechanism to determine the financial need of students, which could be established in cooperation with the Ministry of Welfare and potentially tax authorities. One could imagine replacing the current decentralized institutional scholarship administration by moving this function to the Study Administration Centre that currently also administers the student loans. This may also enhance uniformity in award criteria and as such stimulate transparency, equity and access. Part-time students would also be eligible for need-based scholarships. The scholarships would primarily cover tuition fees, but students in need could also apply for them to cover living expenses if the pool of funds allows for it. In the current system, around 14 percent of the “budget place students” receive scholarships, which is low by international comparison. Most countries offer between 15 percent and 35 percent of the students’ need-based support in the forms of grants and scholarships. Depending on the investments foreseen by the Latvian government, such proportions may also be reachable in Latvia, particularly

because of the already envisaged establishment of need-based scholarships that come in addition to the current scholarship budgets.

Student loans would be made available to everyone by introducing a general state guarantee. The private guarantor for student loans is replaced by a state guarantee. So everyone (all full- or part-time students) is able to get a student loan. The state could introduce a merit-based element: for example, if a student belongs to a predefined percent of best graduates, a certain part of the debt is remitted. Student loans can be partially related to tuition costs as well as to the cost of living. Both scholarships and loans would ideally be administered by a central authority to guarantee students in different programs and institutions have equal opportunities and transparency in the system to underpin their study choices.

The funding model should not be regarded as an isolated instrument; it needs to be part of a more comprehensive steering model. It is important to set favorable framework conditions by complementary reforms in other areas. The effects of a funding model result from its interaction with other elements of higher education planning and steering. Several favorable conditions would maximize the effectiveness of the new model; a few of these conditions are listed below[16]:

- A strategy on national research priorities and focused strategic plans of the higher education institutions.
- A valid and trusted national database to monitor the system with key indicators. Synergies with existing datasets should be realized. For instance, it could be interesting to take the development of the U-Multirank[17] dataset into account, where indicators for the individual objectives in performance agreements could be found. This will require common data definitions and may suggest the use a standardized accounting and financial system that links with the performance data.
- Information to inform student study choices. The comprehensive data system provided by U-Multirank, including data from student surveys, could help students to compare different study options. An additional initiative providing important data is the establishment of an alumni database and information about labor market perspectives collected from alumni.
- Verification and potential enhancement of the administrative capacities of MoES and other relevant public agencies is required for successful implementation of the model.
- A robust quality assurance process, both for teaching and research, the outcomes of which should regularly inform the system, institutions, students, parents, employers, business and other stakeholders in an objective way.
- A reasonable level of inter-ministerial coordination to create transparency and consistency in funding incentives, methods, and levels when multiple ministries are involved in higher education funding.

[16] A critical condition is further a viable system to determine student financial needs, an aspect which would need to be discussed further with the Ministry of Welfare.
[17] http://www.umultirank.org/

- In principle, similar funding mechanisms ought to apply for teaching and research throughout colleges, universities, and research institutes to foster one singular (yet diverse) higher education and research system. Some of the sector diversity can be captured with proposed institutional indicators and by utilizing performance agreements (for example, see Appendix 1) for acknowledging specialized institutional missions. The drivers behind each sector's allocation can reflect the primary activity area or emphasis for those institutions. As such, universities would have a stronger alignment of funding mechanisms for teaching and research, whereas colleges would be predominantly funded for teaching, and research institutes for research only.

4.4 How Does the New Model Address the Main Challenges of the Current Model?

Table 13 briefly explains how various aspects of the new model address key challenges of Latvia's current model and how these aspects meet the aforementioned criteria for a good higher education and research funding model.

Table 13: Overview of how new model addresses current challenges and meets criteria

Challenges of Current Model	New Model	Assessment Criteria Supporting New Model and alignment with strategic policy objectives
Latvian higher education is underfunded, especially in terms of public funding.	Modernization of the funding model and strengthening its links with policy objectives to justify the possible increase of public funds.	*Strategic orientation:* Promotes national strategies. *Legitimization:* Provides unambiguous and balanced funding structures. *Practical feasibility*: Ensures coherence with funding levels. *Supports strategic objective: "Enhance funding base of higher education".*
"One-dimensional" and static state funding model lacking two important pillars of funding, namely performance-oriented funding and innovation-/profile-oriented funding.	Implementation of the three-pillar funding model consisting of pillar 1 (basic funding), pillar 2 (performance-oriented funding), and pillar 3 (innovation-oriented funding).	*Strategic orientation:* Promotes national strategies and institutional profiles. *Incentive orientation:* Provides performance rewards, competitive environment, clear and non-fragmented incentives and aims to balance ex post and ex ante performance orientation.

		Legitimization: Provides unambiguous and balanced funding structures. *Supports strategic objectives: "Increase quality of education and link with the national economy" and "Increase the quality and international competitiveness of research".*
Funding model lacks alignment of basic funding of teaching and research.	Implementation of pillar 1 (basic funding) which aligns the teaching and research funding streams.	*Sustainability:* Supports stability and takes into account cost differences. *Incentive orientation:* Provides clear and non-fragmented incentives. *Practical feasibility*: Uses available data and ensures administrative efficiency. *Supports strategic objective: "Increase sector efficiency".*
Study place model and state research funding model are not creating meaningful and appropriate performance incentives for HEIs.	Implementation of pillar 2 (performance-oriented funding) to create performance incentives for HEIs.	*Incentive orientation*: Creates performance rewards. *Strategic orientation:* Promotes institutional profiles. *Legitimization:* Makes funding transparent and supports the perception of fairness. *Practical feasibility:* Respects methodological standards. *Supports the strategic objective: "Increasing quality of education and link with the national economy".*
Model offers HEIs only limited incentives for promoting national	Implementation of pillar 3 (innovation-oriented funding) to	*Strategic orientation:* Promotes national strategies and

higher education strategies and strengthening institutional profiles. Research funding streams (including EU Structural Funds) do not contain clear and transparent incentives for diversification of institutional profiles, consolidation activities between HEIs, collaboration between research organizations or with external partners. High reliance on EU Structural Funds harms the long-term financial viability of HEIs. Income from private sources like industry or community services appears to be relatively underdeveloped.	provide state funding for activities that contribute to the targets set in a performance agreement. The targets take into account national priorities and HEI profiles and strategies (for long-term development). EU Structural Funds are to be included in pillar 3, although they have mainly a short-term character supporting important immediate changes in the sector (e.g., diversification of funding sources, consolidation activities, and collaboration with external partners). Pillar 3 contains state funding of research centers of excellence taking into account evaluation outcomes and a national strategy of research priorities.	institutional profiles. *Incentive orientation:* Provides competitive environment, balances ex post and ex ante performance orientation. *Sustainability:* Allows long-term planning, promotes risk spreading. *Practical feasibility*: Ensures administrative efficiency. *Supports strategic objective: "Enhance technology, innovation, creativity, and entrepreneurship" and "Increase the quality and international competitiveness of research".*
Great level of financial autonomy is not always utilized by HEIs and it is not accompanied with a high level of accountability towards external stakeholders (both public and private).	Offering training and capacity-building activities in financial management in order to stimulate peer learning in financial steering and planning. Maintaining the high level of financial autonomy, but increasing accountability and transparency through performance-measurement, annual performance agreement reports, and published financial statements.	*Autonomy and flexibility:* Allocates lump sums, guarantees academic freedom, implements adequate level of regulation, guarantees autonomy of resource allocation and promotes accessibility of diverse income sources. *Supports multiple strategic objectives.*
Dual track system with merit-based selection of students for state-funded study places is likely to subsidize full-time students from better-off socioeconomic backgrounds.	Continued reliance on tuition fees in a cost-sharing approach, but introduces more need-based scholarships to widen access and address equity concerns. Merit-based elements are included in the scholarship and loan scheme,	*Incentive orientation*: Creates performance rewards. *Sustainability*: Guarantees continuity in funding mechanisms, promotes risk spreading.

Current student support system is highly decentralized, and its strong merit-based emphasis is likely to have negative impact on access and participation especially in the case of students from disadvantaged backgrounds, and to some extent, part-time students.	but only as a second-order allocation criterion. Introduction of state guarantee for student loans enabling all students (full-time and part-time) to benefit from loans. Loan debt of the highest performing graduates could be partially remitted with public funds. Scholarships and loan schemes should be administered by a central authority.	*Legitimization*: Supports the perception of fairness. *Autonomy and flexibility*: Promotes accessibility of diverse income sources. *Practical feasibility*: Ensures administrative efficiency. *Supports strategic objective: "Stimulation of participation in and access to higher education".*

4.5 Impact on Different Stakeholders

Implementing the proposed new funding model will affect many stakeholder groups. A major factor for the quality of the new model lies in its benefits for the stakeholders. This section gives answers to the question "How will we benefit from the funding reforms?" from the perspective of the different stakeholder groups. The listed implications for different groups are related to different elements of the reform: Whereas many effects of the state funding model are likely to affect the institutions, the students are more likely to be affected by student funding (and to a smaller extent by the other reform components). As a major focus lies on the reform of state funding, the number of impacts on private higher education institutions is smaller. The impacts listed below will be generated by implementing all the proposed changes in the funding system; a partial realization of the recommendations would lead to a partial realization of the listed impacts.

Public higher education institutions

- The overall financial situation improves
- Basic budgetary stability is guaranteed
- State micromanagement of study places is reduced
- Good performance is rewarded
- Autonomy is guaranteed (also regarding mechanisms of internal resource allocation)
- The development of specific profiles and of own goals are promoted
- Performance is measured according to the indicators the institutions choose to represent their own objectives, which leads to more impact on the definition of success criteria
- Financial sources become more diverse
- Professional financial management is promoted by peer learning
- The funding source of tuition fees is retained
- Reduced social selectivity leads to a larger potential to attract good students

Private higher education institutions

- Public funding for program innovations is provided
- Tuition fees are a general feature of the whole higher education system
- Modified student loan program would also benefit private institutions.

Non-university research institutions

- Research excellence in cooperation with universities is promoted
- Cooperative activities such as joint doctoral schools are promoted

University staff

- The potential to do research increases
- Good performance is rewarded
- Autonomy is guaranteed
- Engagement in the strategic development of universities is promoted

Students

- Attractive and innovative study programs are established
- Improvement of funding situation and competitive environment for higher education institutions offer the potential to increase teaching quality
- Study place planning process better adjusts study places to labor market needs
- Public funding, scholarships and loans become available for part-time students
- As more students pay tuition fees, the volume per student is reduced, and tuition fees are charged in a fairer way
- Social selection in access is reduced
- Students with a lack of own financial means get better access to scholarships and loans
- Students do not have to bring a guarantor to get a loan

Government

- Political blockades to reform could be overcome
- The study place system allows governmental planning
- Sector consolidation is promoted

- Horizontal diversity of higher education institutions is promoted to cover all kinds of societal needs
- The attainment of national goals is measured and incentivized, and a competitive environment is created
- Political preferences directly lead to budget allocations through performance-oriented funding
- Financial statements increase transparency

Employers/industry

- Employability is a relevant issue for study place allocation and performance measurement
- Employers are actively involved in state planning processes
- Cooperation with higher education and research institutions is promoted (e.g., through possible industry participation in innovation funds)
- Knowledge vouchers offer chances for small and medium enterprises to cooperate with universities

General public

- Political blockades could be overcome
- An efficient and effective higher education system is promoted
- Horizontal diversity of higher education institutions is promoted to cover all kinds of societal needs
- The attainment of national goals is measured and incentivized
- Financial statements increase transparency
- Accessibility of higher education is promoted

5 From Conceptualization to Implementation

5.1 Alternative Scenarios

This section presents three scenarios in which a new funding model for Latvian higher education could operate. The three scenarios are related to the extent to which the whole system can attract more funding from the state and, to a lesser extent, from private entities. The three scenarios are as follows:

A. Develop the knowledge society model
B. Limited expansion model
C. Scarcity model

For each scenario, a brief table is provided to clarify the components of the funding model described in the previous section that should be prioritized for implementation, and those aspects that would likely need to be postponed until sufficient funding was available to introduce them. In other words, the "Extra Components" should not be forgotten but would likely be postponed until enough funding was available to support their implementation. Additionally, the final row in each table briefly describes other options or alternatives to consider.

Based on the findings of its overall engagement in Latvia, **the team would strongly support the first scenario aimed at developing a knowledge society in Latvia**. However, **this scenario would need significant political commitment not only from the government but from all main stakeholders involved**.

A: Develop the knowledge society model

The basic assumption in this scenario is that the government will have the opportunity and willingness to substantially increase its investment in higher education, as originally envisaged in its higher education legislation. This would provide the system with a resource level that can support the various incentive mechanisms of the three-pillar model.

Components Included	Extra Components Introduced When Future Funding Levels Allow
• Revised study place model (pillar 1) • Basic research funding per faculty member (pillar 1) • Universal indicator-based funding formula (pillar 2) • University-specific indicator funding (pillar 2) • Performance agreements negotiated by MoES and each institution that cover both teaching and learning initiatives and centers of excellence (pillar 3) • Provision of financial management training and support for institutional management to maximize autonomy	• Not applicable

• Transitional use of Structural Funds (e.g., for consolidation) • Some reliance on tuition fees in a cost-sharing approach • Need-based student aid (with merit component), as tuition fee waiver plus support of living costs • Enhanced student loan program with state as guarantor	
Alternatives for Consideration	
• Establish tuition levels to complement the amount of public funding for the sector (e.g., higher public funding could allow lower tuition fees) • 'Innovation Fund' for internationally competitive research in collaboration between higher education and/or research institutes, industry and international research organizations as a specific, separate part of the third pillar	

For Latvia to transition to this or any reformed funding model, the MoES will have to prioritize and sequence initiatives based on significant sector consultation to ensure institutions and individuals are adequately prepared for the change.

B: Limited expansion model

In this second scenario, the amount of public funding enables limited investment increases in higher education. The main difference is that the system is not likely to have enough funding to fully support the components in pillar 2 or pillar 3. In order to make better progress towards Latvia's higher education policy objectives, this scenario emphasizes the performance agreements for each institution as a way to agree on the expected contributions of each institution in exchange for the funding received from the state. It also integrates some needs-based elements of student funding.

Components Included	Extra Components Introduced When Future Funding Levels Allow
• Revised study place model (pillar 1) • Performance agreements negotiated by MoES and each institution • Continued financial autonomy and support for institutions • Transitional use of structural funds (e.g., for consolidation) • Increased reliance on tuition fees • Need-based student aid but only as fee waiver • Provision of financial management training and support for institutional management to maximize autonomy • Modified student loan program • Limited teaching innovation fund provides start-up capital for promising new programs with enough resources to seed about x initiatives per year under the assumption that y programs will	• Basic research funding per faculty member (pillar 1) • Universal indicator-based funding formula (pillar 2) • University-specific indicator funding (pillar 2) • Funding to cover both teaching and learning initiatives and research centers of excellence (pillar 3)

be sunset (this would occur on a larger scale under pillar 3 in scenario A)	
Alternatives for Consideration	
• With the higher private cost-share (i.e., tuition), a portion of those additional funds (e.g., 20 percent) must be immediately reallocated as need-based aid to support students unable to afford the tuition fee • Relative funding model based on the numbers of new entrants, students, graduates, PhDs according to 3 different funding tariffs (social sciences, science and engineering, medical programs) and relative success in attracting third-party funding • Repurpose EU Funds into an 'Innovation Fund'	

C: Scarcity model

The third and final scenario is designed around a situation in which the government cannot afford to make additional investments in higher education. This scenario is completely geared towards an attempt to optimize the current funding levels and mechanisms towards the strategic objectives that receive highest priority in Latvian higher education.

To be clear, the current system is significantly underfunded in comparison to not only other European countries but, importantly, also vis-à-vis the government objectives and legally set targets per study place. Acknowledging that Latvia has many competing demands for its limited resources, flat funding will continue to negatively impact the quality of higher education and thus jeopardize the country's competitiveness. Without any incremental funds, there is minimal capacity to reform the financing model. Allocating fewer or even the same amount of resources differently may create substantial volatility within the system. Although the components may look similar to Scenarios A and B, the anticipated outcomes, as they relate to quality and the pursuit of policy objectives, are expected to be significantly lower in this final scenario.

Components Included	Extra Components Introduced When Future Funding Levels Allow
• Revised study place model (pillar 1) • Performance agreements negotiated by MoES and each institution (no additional funding for financial incentives unless funds are pulled from the study place model – not to be recommended under this scenario) • Provision of financial management training and support for institutional management to maximize autonomy • Transitional use of Structural Funds (e.g., for consolidation, innovation funds, etc.) • Further increased reliance on tuition fees • Repurpose merit-based scholarship to need-based student aid	• Basic research funding per faculty member (pillar 1) • Universal indicator-based funding formula (pillar 2) • University-specific indicator funding (pillar 2) • Funding to cover both teaching and learning initiatives and research centers of excellence (pillar 3) • Need-based financial aid • Modified student loan program (based on need and state as guarantor)
Alternatives for Consideration	

- Maintain the study place model but add a fixed allocation per student to include a premium per graduate with different funding tariffs (social sciences, science and engineering, medical programs)
- Align allocation mechanism of Structural Funds with those of the Science Council and operate a few programs for competitive research funding, one based on academic criteria, one on collaboration with private partners and one on international collaboration for EU funding
- Limited scholarships based on need and merit

5.2 Implementation Roadmap

As indicated in the previous parts of this report as well as in the previous reports within this project, **many stakeholders within and outside Latvian higher education indicate that the system requires change in its financing structures and instruments in order to make Latvian higher education and research more competitive internationally and better serve the needs of society.** As argued before, the system needs stronger incentives towards quality, performance, efficiency as well as maintaining a healthy level of stability. Latvia's current funding model, at least for allocating funding, is specified in Cabinet Regulation No. 994, "Procedures for the Financing of Institutions of Higher Education and Colleges from the Funds of the State Budget." Table 14 below reiterates many of the weaknesses of Latvia's current funding and highlights potential modifications necessary should Latvia move forward with any of the recommended changes.

Table 14: Cabinet Regulation No. 994

Cabinet Regulation No. 994 Procedures for the Financing of Institutions of Higher Education and Colleges from the Funds of the State Budget
• Single pillar model of state funding does not offer the advantages of a multi-pillar approach • Little to no real performance orientation in state funding, except that internal allocation for the development of scientific work should be based on competition results (but what results?) Limited incentives for promoting national higher education strategies and in strengthening institutional profiles • Little to no integration of funding for teaching and research • Little to no funding for innovative initiatives • No clear approach to the role of state money for private HEIs • No funding options for research-related developments such as post-docs, knowledge transfer activities, etc. • Performance contracts between MoES and HEIs are under-utilized compared to their potential • Suggestion that it is known what the actual basic costs of a study place are, regardless of the institution, teaching/research intensity while in the end institutions have a high degree of spending autonomy • Calculating many support facilities per study place with subjective expert opinions and no relationship to potential economies of scale • No reasoning why an optimal and minimum value of the coefficient of study costs per field of study is necessary and why the differences between these vary from discipline to discipline • Complicated formula when in practice prices are substantially reduced

- Is it necessary to include transportation and vehicles, hostels etc. in the social security part?
- Promised funding levels not yet effectuated
- Cost basis for subsidized study places outdated
- Opaqueness and subjectivity in allocation of subsidized study places, relation to Doctoral Degree holding academic staff, planning problems through yearly interventions
- State-subsidized study places are likely to benefit students from better socio-economic backgrounds
- No state-subsidized study places for part-time students

The previous section has described three scenarios for the further development of the financing structures and instruments in Latvian higher education. **However, implementing new structures and instruments that support the system to develop in the desired direction has to be done in a careful way**, particularly because the good elements of the current system – such as a diversified institutional landscape, institutional autonomy and a dedicated academic workforce – should not be lost but strengthened. Nevertheless, the system requires a strong incentive impulse in the short run in order to immediately initiate a system-wide move towards the national strategic objectives of a high quality and competitive higher education and research system.

There are a few conditions favorable to initiate the required change. First of all, the government's intention to increase its investments and expenditure on higher education – if materialized – will provide the opportunity to develop new funding instruments that can be developed with "new money" flowing into the system. It is generally known that changes in the funding regime are much more likely to be acceptable and successful if "new money" is involved – unless all stakeholders are convinced that something in the current funding regime has to change.

The second favorable condition for funding reform is the forecasted decline in student numbers. Besides the negative effects this may have on the development of a knowledge economy and reduced tuition revenues from self-funded students, this may also lead to relatively higher future expenditure per student compared to current levels. The money "freed up" due to a decline in student numbers, can be used to intensify and improve the quality of teaching and research. It is assumed that the government's intention to intensify higher education investments will at least secure current absolute funding levels.

When implementing a new funding regime, governments can use various strategies. First, one could use a "shock therapy" including radical changes and accepting substantial changes for various stakeholders and institutions in the system. This is not a preferred option. The second strategy would be of a more gradual – but certain – shift towards the new situation. This can be accomplished through a transition towards a new funding regime but with a cautious implementation path, e.g., with maximum changes in institutional budgets of plus or minus 5 percent per year in the first five years. The third strategy would be a gradual reduction of the relative size of the basic funding method (in Latvia the study place model). This would be accompanied by the introduction of new funding instruments that

will gradually grow in importance over the years up to the levels that are politically desired. This development is depicted in Figure 3 below, one for each for the three proposed scenarios.

In the scenarios, it is also mentioned that Latvia could consider a revised (and fairer) tuition fee model. This is not a precondition for the other elements of the funding reform, but – besides equity considerations – it may substantially help to diversify institutional resources and to maintain the income stream that institutions may lose in the coming years through the declining numbers of (part-time) full fee-paying students as a result of the demographic change. This, however, remains a political decision. Tuition revenues have also been integrated in the graphs below, but are not critical to the changing state funding regime.

The three scenarios demonstrate the main elements of the new public funding structure to allocate teaching and research funds to higher education institutions: pillar 1 funds (a modified study-place model), pillar 2 funds (performance based funding) and pillar 3 funds (innovation funds for teaching and research).

Figure 3 shows the implementation paths of the different scenarios. All scenarios set the 2014 higher education budget at one hundred and then demonstrate an increasing or decreasing pattern for the various pillars. In 2014, the total budget is assumed to consist of pillar 1 funding and some tuition revenues (currently from full-fee paying students). As indicated, above figures are only provided for the illustration of a possible phasing-in of the three-pillar model under different scenarios. The tuition fee revenue stream is kept constant and remains included in the three figures.

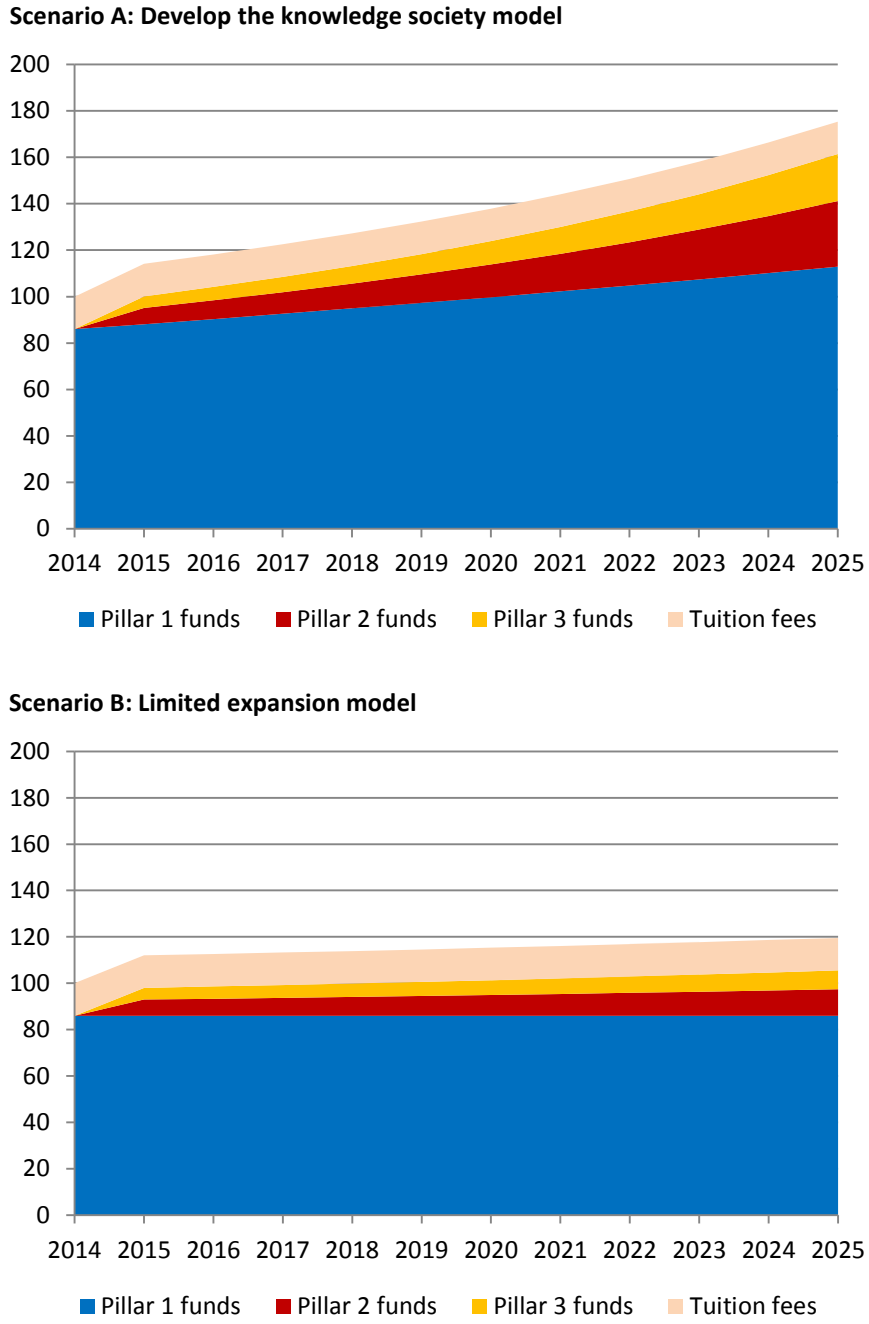
In Scenario A, which assumes a growing investment path, all sources of revenues are considered to grow. Pillar 1 funding grows at an annual increase of 2.5 percent; in addition, a performance-based budget (pillar 2) and an innovation fund (pillar 3) have been installed, both growing by 15 percent annually. Most of this growth comes from government investments, but the innovation fund is assumed to be shared with business and industry. Generic tuition fees are an optional instrument to generate additional revenues.

Scenario B demonstrates a less intensive growth pattern. Regardless of the decline in student numbers, pillar 1 funding is kept stable and is topped up with a performance-based budget (pillar 2) and an innovation fund (pillar 3). Both are assumed to increase by 5 percent[18] annually, including some additional funds from business and industry.

Scenario C shows a situation where public spending is kept relatively stable, while the decrease in student numbers (assumed – for illustration purposes – to be 2.5 percent annually) **will lead to a similar decline in pillar 1 funding.** However, in this illustrative example the budget that becomes available will be reinvested in setting up pillar 2 and pillar 3 funding which will make the system more competitive and oriented towards Latvia's strategic objectives.

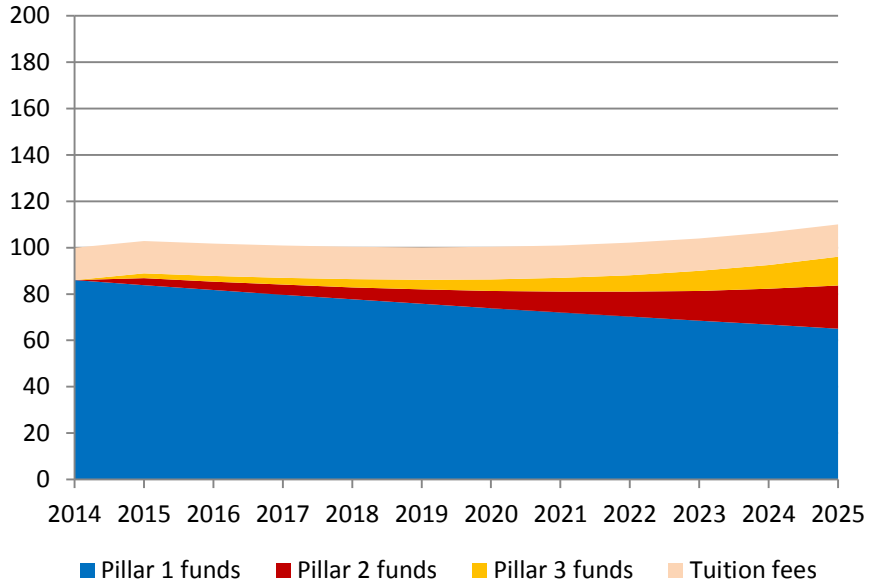
[18] These figures are only used to illustrate the possible phasing-in of the model. In practice, this development is likely to be less linear, as political decisions are made for a legislation period – or different time span – impacting on the graph.

Figure 3: Possible development of funding pillars under scenarios A, B, and C[19]



[19] These scenarios are provided for illustration purposes only. The actual developments and allocations will depend on political – and subsequent funding – decisions of the Government of Latvia.

Scenario C: Scarcity model



Over time, all scenarios create some space to make the system as a whole more competitive and quality-oriented while maintaining a stable basis of pillar 1 funding; **however, under scenario C this happens to a more limited extent and with a significant time lag.**

The implementation trajectory for student financing is different from the public funds for higher education institutions. The transition towards a more need-based than merit-based scholarship system can be accomplished in several ways. First, the current merit-based scholarship system can be topped up with need-based scholarships, as foreseen in the government plans. One can also increase the need-based criteria within the current scholarship programs and increase the budget by a level desired by the government. However, a stronger need-based orientation may require a more uniform and transparent need-testing (parental income test) which in most countries is most efficiently organized at the central level, e.g., based on tax information. This may require a shift in replacing institutional infrastructures to distribute scholarships to a national (ministerial) unit to provide the scholarships. This may cause some additional investment in setting up such a unit, processes and procedures, but may lead to a nationally more transparent scholarship system that enhances access and equity through more uniformity and certainty to students about what they may be entitled to regardless where they study.

With regard to student loans, the transition from a guarantor requirement and various debt remittance structures towards a more need-based system requires administrative changes as well as a potential redistribution of funds. If students from lower income backgrounds can receive loans – maybe topping up their scholarships if they receive these – than the same need-test that applies for scholarships can be applied for loans. The current subsidies through debt remittance for graduates with particular types of jobs and who have children can be used to guarantee repayments or debt remittance for graduates who cannot repay due to low income.

Finally, the process towards the real reforms requires intense stakeholder consultation and monitoring. Similar to the current process of developing the ideas for a new funding arrangement for Latvian higher education, the implementation of a new funding model and student financing should be achieved in close collaboration between the government, ministries, higher education institutions and various other stakeholders. As a start, one could ask the various stakeholders for their feedback, e.g., in the form of short statements about the elements that should definitely be in the new funding model. Later in the process, the new model should be tested against its "real world impact." This could, inter alia, include a model simulation in the first year (though funding could, de facto, still follow the previous model) so that everyone has advance notice for how they fair in the new system. During subsequent phases, some funds could be set apart to initially "soften" the impact for some institutions more severely affected. These and other considerations will need to be discussed before implementation.

To monitor and evaluate the implementation, a committee of representative stakeholders should be convened and charged. Aside from certain ex officio members and MoES leadership, other committee members should be selected to represent the interests of key stakeholder groups (e.g., students, academic staff, institutional leaders, employers, government representatives, etc.), serve staggered terms to ensure continuity, and vow to act in the interests of Latvia's entire tertiary education sector.

As a proposal, this document intends to provide important overall direction for Latvia's higher education funding model, but considerable work remains to implement this program and then monitor its success. This Committee would provide guidance and feedback to identify, implement and evaluate actions that address the arguments and recommendations contained within the World Bank team's reports. Sample activities for the committee include:

i. Develop detailed implementation plans and operational activities, utilizing international experts and stakeholder feedback, that align with the approved funding model
ii. Facilitate collaboration among stakeholders in Latvia higher education sector as they implement a revised funding model
iii. Monitor progress and expected goal attainment utilizing performance indicators and metrics
iv. Disseminate information and annual progress reports about the implementation throughout the higher education sector and to external parties
v. Identify training and resources required to implement the funding model
vi. Adapt objectives/action steps of the funding model in light of future developments or as needed

Focusing on specific next steps for implementation, the MoES and the new Committee could appoint a Task Force of experts to work with select MoES and institutional leaders with technical expertise in the funding of higher education to prepare detailed implementation plans, including activities, phasing (if appropriate), timelines, resource requirements, roles and responsibilities, risks, and mitigation strategies. The Task Force could then submits its detailed implementation plans for the Committee's feedback.

The World Bank team is convinced that all stakeholders in Latvian higher education have a strong interest in the enhancement of the higher education sector in terms of quality, efficiency, strategic orientation, international competitiveness and equity. The positive spirit that was experienced in the

process until now has to be used to materialize the steps that will really bring about the sector-wide improvements that Latvian higher education deserves. Bringing about financial reforms will not only change the mechanics of financial instruments, but will also stimulate a cultural change towards an identity that is related to quality, efficiency and strategic orientation.

Appendices

Appendix 1 Sample Performance Agreement

Appendix 1.A Guidelines for a performance agreement

1. **Role of the guidelines**: Performance agreements (also performance contracts or target agreements) are based on trust between the contract partners. Trust is endangered if the partners have different ideas about the function and the right way to deal with the contracts and if these differences emerge during the process. The consensual definition of the "rules of the game" should guarantee that everyone could rely on a common notion about performance contracts. The contract partners (MoES and higher education institutions) should regard the rules as binding guidelines for the steps taken and the behavior in the process. In each phase each partner could remind the other of the rules set. Both partners of a contract should be aware that it takes many steps to build trust in such a process, but one mistake is enough to destroy it again. It is extremely important that both sides see the objectives in the performance contract as an obligation; contracts must not be broken.

2. **Objectives and role of the performance contracts in Latvia:** The performance contracts intend to bring "to life" – together with the formula in pillar 2 – the national objectives for the higher education sector through stimulating the universities to engage for these objectives. But at the same time they want to stimulate institutional strategic planning and the development of university profiles. This means the contracts play a coordinative role in national and institutional strategies. All this is supported by connecting a financial "innovation pool" to the objectives (pillar 3 of state funding). The performance contracts will turn objectives into clear and controllable/measurable targets. They should promote the dialogue between ministry and universities on the level of objectives and output/outcome, and they should legitimize the allocation of public resources through transparency of funding criteria. As innovative processes take time, performance contracts should also lead to a multi-year funding perspective. A period of three years seems to be adequate. The performance contracts should refer to the whole set of performances, teaching, research and third mission activities.

3. **Strategy base**: The idea of performance contracts is based on negotiations between the ministry and the individual university about objectives. The objectives have to be derived from strategies of both sides. The national strategy should set the corridor in which the individual university has the discretion to move according to the institutional strategy. Even in a situation without perfect national strategies the contract process could be started by defining a strategic orientation at least for the contractual period. The "strategic fit" analysis reflects the state of national goals; this should be taken as a starting point for the contracts. If national goals are considered, the development of academic qualification paths (through joint doctoral schools with non-university research, post doc programs) or the quality development of study programs through international accreditation, to give just a few examples, could be mentioned in the contracts as state priorities. In the end, this

does not mean that a university has to pick up all of the strategic items; universities should prioritize according to their profile and strategic focus and select areas where they could make the best contributions to national goals.

4. **Steps in the contract process**: The following steps of the contract process are derived from experience (and could be adapted to the specific situation in Latvia):
    - Ministry and universities agree on rules of the game
    - Ministry communicates broad national objectives, sets up all relevant processes, and defines timelines for the following steps
    - Ministry sends an offer to universities to start negotiations on performance contracts, defining formal structure/format of the contract
    - Each university develops a contract draft in an internal participative process and sends it to ministry
    - Ministry analyzes all drafts from universities, compares the drafts, and develops a negotiation position
    - Negotiation, separate with each university (meeting, discussion of positions)
    - Revision of contract drafts by universities
    - Agreement (if necessary additional meetings, exchange of papers)
    - Signing and publishing of the contract
    - Allocation of budget
    - Workshop with ministry and all universities on experiences with the instrument, conclusions for the next round
    - Controlling, report by each university
    - Annual meeting with each university, if necessary revisions of contract
    - Financial rewards/sanctions

5. **Partnership and division of rights**: Performance contracts intend to stimulate negotiations between autonomous partners. However, even in a situation of university autonomy an asymmetry remains in the partnership: The ministry provides the public budget and the university wants to have it. In order to guarantee a respectful partnership, there should be clearly divided rights to do specific things in the contract process (establishing a top-down/bottom-up process).

    Only the ministry has the right to do the following:
    - Take all measures to guarantee that the process stays in line with the legal requirements.
    - Define general national objectives as a framework to the development of individual strategies and profiles of autonomous universities.
    - Define the steps of the contract process and set schedules.
    - Collect the necessary data from the universities.

    Only the university has the right to do the following:
    - Develop autonomously an institutional strategy within the general framework of national objectives.
    - Make the first draft of the performance contract.

- Suggest measures that have to be taken to realize the intended objectives.
- Make the first suggestion for university-specific indicators and aspired indicator values.

6. **Procedural and funding rules and mechanisms**:
    - In general the signing of contracts by universities is voluntary. If a university does not provide a draft for a contract, it will receive no funding from the third pillar. There is only one obligatory element: The definition of institution-specific indicators that go into the funding formula.
    - The performance contracts should run for three years, with talks and possibilities for revision every year.
    - The funding from the innovation pool should be linked to the degree of aspiration and also to the level of attainment of objectives. This means that it has to provide pre-funding according to the level of future objectives and to specific measures to be taken, and it has to define rewards and sanctions if targets are met or missed.
    - The contracts are signed by the rector and the minister. They are published on the internet.
    - The targets have to be measurable/controllable (by indicators, by yes/no). Yearly reports and discussions should be used to analyze the reasons behind the development of indicators. All targets should be performance-/output-/outcome- oriented.
    - Targets could only be interpreted on the basis of a status quo analysis. This should be provided in the performance contract.
    - Activities and measures done by the universities could appear in the contracts (and in reports) if the universities want to present them. Their description is helpful in order to generate trust that performance targets could really be achieved. But they are not linked to the assessment of success of the university; the success parameters are the performance indicators. The universities should have the flexibility to change measures within the contract period if they find better ways to achieve the goals. Sometimes the borderline between activities and goals is not perfectly clear; for example, is quality assurance through international accreditation just an activity or already a goal? Here the system has to stay flexible.

7. **Format**: For the performance contracts there should be a standardized format that guarantees that certain standards are fulfilled:
    - The contracts should be focused on a few priorities and not all aspects of university activities.
    - The contracts should provide measurements and controlling approach which focus on performance/output/outcome; they should not see the fact that money is spent for the predefined purposes as a success factor.

    These standards lead to the grid for performance contracts shown below. This gives a general structure for contracts to be used by all universities. There should be some discretion in handling this structure for the university; the way of using the structure could adapt to the culture practiced

in each of the universities, without losing the "storyline" and the level of specification defined in the format.

Appendix 1.B Example Structure Performance Agreement

Performance contract between the University X and MoES (201X – 201Y)

1. Preamble

The performance contract intends to bring the national objectives for the Latvian higher education sector "to life" through stimulating the universities to engage for these objectives. But at the same time they want to stimulate institutional strategic planning and the development of university profiles. This means the contracts play a coordinative role in national and institutional strategies. All this is supported by connecting a financial "innovation pool" to the objectives. The contract will turn objectives into clear and controllable/measurable targets. The performance contract should promote the dialogue between ministry and universities on the level of objectives and output/outcome, adding a performance element to traditional study place funding, and it should legitimize the allocation of public resources through transparency of funding criteria.

University X and MoES share this understanding of performance contracts and will contribute to the realization of these objectives.

2. National objectives in Latvian higher education

In the period 201X – 201Y, the major national objectives and priorities of the Latvian government for the performance contracts include the following:

XXX

These objectives define the boundaries and the general framework for institutional strategies of Latvian universities. MoES and University X agree to promote the autonomous development of strategies and a profile of University X. The boundaries defined by the national priorities will leave sufficient discretion for autonomous target setting of the university.

Not each university could contribute by the same degree to different goal areas. Depending on the strengths and strategies of University X, it should prioritize the national goals, mention the objectives it wants to focus on, and if necessary add specific goals relevant on the institutional level.

3. University profile

In the period 201X – 201Y, the major objectives and priorities of University X according to the specific development of a profile include the following:

XXX

4. Prioritization of objectives by University X

Based on the institutional strategy, the national objectives (and if relevant for the profile additional compatible goals) are prioritized in the following way:

Objectives	**Degree of priority (A-B-C)**	**Explanation (regarding the situation of the university)**

The A-priorities form the major part of this contract.

5. Operationalization of objectives and status quo analysis

Each of the top priorities of University X has to be operationalized by breaking it down to sub-goals and their measurement:

Priority 1: XXX	
Sub-goal	**Indicator/measurement** (including exact operationalization how to measure, which data to use, etc.)

Priority 2: XXX	
Sub-goal	**Indicator/measurement** (including exact operationalization how to measure, which data to use, etc.)

Etc.

Out of the proposed indicators, the following indicators will go into the funding formula:

XXX

For all indicators/measurements used the status quo looks like the following:

Indicator/measurement	**Available data within last 3 years**	**Interpretation/explanation of current situation**

6. Performance obligations of University X

The intention of University X is to achieve substantial developments, improvements and changes in the priority areas. The indicators provide the relevant information to assess these developments. University X and MoES agree to set the following targets for the contract period:

Indicator/measurement	**Target**	**Timeline for achieving target**

7. Activities and measures to realize the objectives

University X will undertake the following activities and measures to realize the objectives:

- XXX

The description of the activities intends to make the efforts of University X to achieve the goals plausible and understandable. The realization of certain activities does not indicate performance and will not be controlled as success criteria within this contract. University X will adapt activities (and report the adaptation) within the funding period if better ways to achieve the goals are discovered.

8. Financial support and incentives for achieving the targets

MoES financially supports the activities to achieve the objectives from an "innovation fund" (not all objectives require additional funding):

Activity	**Contribution to goal achievement**	**Funding (Year 1, 2, 3)**

The achievement of the targets in paragraph 6 is measured and rewarded/sanctioned by the following mechanism:

XXX

(there are alternatives for incentives: reward/sanction according to achieved percentage of targets, measurement after year 2 and cut of funding for year 3 if goals are not achieved, etc.)

9. Centers of Excellence

Centers of excellence in research have been defined out of a peer review process. University X has the following centers with the following partners:

XXX

For the contract period, the following research performance goals are directly linked to the center of excellence:

Indicator/measurement	**Target**	**Timeline for achieving target**

For the center of excellence, the university receives a basic funding of XXX. The full payment of this funding depends on goal achievement using the following mechanism: XXX.

10. Time horizon, controlling, dialogue

The performance contract will run for the period 201X – 201Y and terminate on XXX. Every year in (MONTH) University X will write a short report on goal achievements, using the indicators and measurements in this contract. Based on the report, every year in (MONTH) MoES and University X will meet for a discussion of the developments and further perspectives. If both parties agree, performance contracts could be adapted to unforeseen developments.

_____ _____

Minister Rector

Appendix 2 Stakeholder Reactions

MoES would be invited to collect feedback on final report/all three outputs (e.g., in format of 1-pager) which could then be attached here.

Appendix 3 Stakeholder Consultations

Workshop: 2 December 2013

Institution, organization	Representative(s)	Position
Ministry of Education and Science	Iveta Graudiņa	Councilor to the Minister
	Līga Lejiņa	Director of the Department of Political Initiatives and Development
	Inese Stūre	Deputy Director of the Department of Higher Education, Science and Innovations
	Marina Mekša	Senior Expert of the Department of Higher Education, Science and Innovations
	Anatolijs Melnis	Senior Expert of the Department of Higher Education, Science and Innovations
	Inta Švirksta	Expert of the Department of Structural Funds and International Financial Instruments
	Laura Treimane	Officer of Higher Education/Local Consultant
State Education Development Agency	Dita Traidās	Director

Stakeholder Roundtable: 3 December 2013

Institution, organization	Representative(s)	Position
Higher Education Council	Andris Teikmanis	Associate Professor

Latvia Students' Union	Ingūna Zariņa	Member
	Asnāte Kažoka	Member
Latvia Confederation of Employers	Anita Līce	Expert
Latvia Chamber of Commerce and Industry	Karīna Zariņa	Director of Political Department
Ministry of Economics	Vita Skuja	Official/Department of Economic Development and Labour Market Forecasts
Riga Stradins University	Toms Baumanis	Prorector of Development
	Jānis Bernāts	Legal Advisor
Business Higher Education Institution, "Turība"	Aldis Baumanis	Lecturer
Latvia Academy of Arts	Andris Teikmanis	Associate Professor
Ventspils University College	Ligita Blumberga	-
Riga Graduate School of Law	Kitija Freija	Director
University of Latvia	Gundars Bērziņš	Chancellor
Riga Academy of Pedagogy and Education Management	Tija Zīriņa	Associate professor, Manager of the Department of the Organization of Studies
Vidzeme University of Applied Sciences	Agnese Lapetrova	Rector's Assistant—Research Coordinator
Stockholm School of Economics in Riga	Rita Kaša	Pro-Rector B.Sc. Thesis Faculty Advisor
Daugavpils University	*Participated.*	
Liepaja University		
Riga Technical University		
Ventspils University of Applied Science		
Latvia University of Agriculture		

Stakeholder Interviews: 5–7 February 2014

Institution, organization	**Representative(s)**	**Position**
Ministry of Culture	Roventa Putniņa	Officer at Budget Department

	Barba Krišjāne	Head of Budget Department
Latvia Academy of Arts	Sandra Plota	Director
	Gita Seņka	Deputy Director of International Cooperation and Development
Latvia Academy of Culture	Zane Šiliņa	Vice Rector
Latvia Academy of Music	Normunds Vīksne	Vice Rector of Academic Affairs
	Irēna Baltābola	Director of Study Programs
	Vita Daudiša	Head of Finance Department
Riga Academy of Pedagogy and Education Management	Dace Markus	Rector
	Daina Voita	Vice Rector of Science
Latvia Academy of Sports Education	Svetlana Panova	Chief Accountant
	Juris Grants	Vice Rector of Science
	Janis Žīdens	Rector
Latvia Maritime Academy	Andrejs Zvaigzne	Vice Rector
	Jānis Brūnavs	Professor
	Jānis Bērziņš	Rector
BA Business School of Business and Finance	Dr. Andris Sarnovičs	Rector
	Līga Peiseniece	Vice Rector for Academic Affairs
Ministry of Defense	Ilona Dreģe	Under State Secretary of Administrative and Legal Affairs
	Inese Kaive	Deputy Director of Section of Military Education and Science of Department of Human Resources
National Academy of Defense	Georgs Kerlins	Vice Rector
Daugavpils University	*Several participants and PhD students from Institute of Systematic Biology*	Students, PhD students
	Inese Kokina	Vice Rector for Research
	Irēna Kaminska	Vice Rector for Studies

Rectors' Conference[20]	Jānis Bernāts	Legal Expert
	Agnese Rusakova	Expert
Higher Education Council	*Several representatives from the Higher Education Council*	-
Ministry of Interior	Alda Strode	Financial Specialist
	Larisa Tumanana	Director of Department of Financial Management
	Agnese Laure	Office at Department of Financial Management, Section of Financial Policy and Methodology
	Gints Rozenbils	Officer at Department of Human Resources Management
Ministry of Agriculture	Ilze Slokenberga	Official of Department of International Affairs and Strategic Analysis
Ministry of Environmental Protection and Regional Development	Edgars Paulovičs	Officer at Zemgale Planning Region Development Department (counterpart of Latvia University of Agriculture)
Latvia University of Agriculture	Jānis Sprukts	Chancellor
	Daira Treigute	Head of Financing Department
	Dita Stefenhagena	Rector's Assistant
State Police	Natālija Dorožko	Head of Financial Department
	Gunta Gregersone	Head of HR Department, Section of Professional Competence Building
State Police College	Māris Riekstiņš	Deputy Director
State Border Guard	Aivars Uzulnīks	Deputy Director
	Velta Grecka	Head of Finance Department
	Sandra Keiša	Senior Specialist of Human Resources Department
State Border Guarding College	Iveta Plasa	Head of Department of Finance and Planning
	Daiga Kupcāne	State Border Guard
Fire Safety and Civil Protection College	Vilis Students	Deputy Director
Ministry of Health	Inese Andersone	Head of Department of Coordination of Financial Analysis and Investment
	Biruta Kleina	Deputy Director of Health Care Department
Ministry of Welfare	Danute Jasjko	Director of Department of Social Services
	Aldis Dūdinš	Senior Expert of Department of Social Services
Riga Stradins University	Toms Baumanis	Vice Rector of Development
	Jānis Bernāts	Rector's Legal Advisor

[20] Separate meeting with Andrejs Rauhvargers, Secretary General of Rectors Conference on 18 February 2014.

	Juris Lācis	Vice Rector of Administration
Red Cross Medical College (of Riga Stradins University)	Gastons Neimanis	Director
	Ināra Urpena	Deputy Director in Academic Affairs and Research
Social Integration State Agency	Jana Pulkstene	Deputy Director in Professional Rehabilitation
	Inese Urpena	Administrator of College Study Programs
Business Higher Education Institution "Turība"	Aldis Baumanis	Associate Professor
Riga International School of Economics and Business Administration	Irina Seņņikova	Rector
	Ilmārs Kreituss	Vice Rector of Academic Affairs
	Tatjana Vasiļjeva	Vice Rector of Science
	Ieva Brence	Head of Department of Economics and Finance
Transport and Communications Institute	Irina Yatskiv	Acting Rector
	Igors Kabaškins	President
	Igors Graurs	Vice Rector of Academic Affairs
Ministry of Economics	Vita Skuja	Officer of the Department of Economic Development and Labor Market Forecasts
	Ludis Neiders	Head of Department of Structural Policy of National Economy, Economic Coordination Section
	Ruta Rimša	Officer at Department of Structural Policy of National Economy, Economic Coordination Section
Ministry of Environmental Protection	Veronika Jurča	Senior Expert of the Department of Regional Development Planning
Cross-Sectoral Coordination Center	Elīna Petrovska	Consultant
Latvia Confederation of Employers	Inga Šīna	National Coordinator in Professional Education and Employment
Latvia Chamber of Commerce and Industry	Aldis Baumanis	Associate Professor
Latvia Students' Union	Ingūna Zariņa	Member
	Līva Vikmane	Member
Vidzeme Planning Region	Kristaps Rocāns	Project Manager
Ministry of Finance	Ilonda Stepanova	Director of Budget Department
	Līga Šulca	Head of Division
Ministry of Education and Science	Inese Stūre	Deputy Director of the Department of Higher Education, Science and Innovation
	Gunta Arāja	Deputy State Secretary—Director of the Department of Structural Funds and International Financial Instruments

	Marina Mekša	Senior Expert, Department of Higher Education, Science and Innovation
	Anatolijs Melnis	Senior Expert, Department of Higher Education, Science and Innovation
	Jānis Paiders	Officer, Department of Higher Education, Science and Innovation
	Reinis Lasmanis	Officer, Department of Higher Education, Science and Innovation
	Kristīne Keiča	Officer, Department of Higher Education, Science and Innovation
	Karīna Aleksandra	Officer, Department of Higher Education, Science and Innovation
	Evita Sarma	-
University of Latvia	Jānis Stonis	Administrative Director
	Gundars Bērziņš	Chancellor (supervises Department of Development and Planning, and Department of Finance and Accounting)
Ventspils University College	Gita Rēvalde	Associate Professor and Rector
Vidzeme University College	Gatis Krūmiņš	Rector
	Iveta Putniņa	-
Liepaja University	Jānis Rimšāns	Rector
Riga Technical University	Ingars Eriņš	Chancellor, Associate Professor
	Uldis Sukovskis	Vice-Rector for Academic Affairs
	Tālis Juhna	Zinātņu prorektors
	Uģis Bratuškins	Dean of the Faculty of Architecture and Urban Planning
	Juris Smirnovs	Dean of the Faculty of Building and Civil Engineering
State Education Development Agency	Dita Traidās	Director
	Elita Zondaka	Head of Department of Structural Funds Management and Monitoring
	Ansis Pekšs	Head of Science Project Monitoring Unit, Department of Structural Funds Management and Monitoring
	Ingus Zitmanis	Head of European Social Fund Project Monitoring Unit, Department of Structural Fund Management and Monitoring
	Atvars Sauss	Head of Infrastructure Project Monitoring Unit, ERDF Infrastructure Project Control Department
	Agnese Aivare	Head of the ERDF Infrastructure Project Control Department

Stakeholder Workshop: 12 March 2014

Institution	Representative(s)	Position
Ministry of Education and Science	Ina Druviete	Minister
	Sanda Liepiņa	State Secretary
	Līga Lejiņa	Director of the Department of Political Initiatives and Development
	Agrita Kiopa	Director, Department of Higher Education, Science and Innovations
	Jolanta Silka	Officer, Department of Higher Education, Science and Innovations
	Jānis Paiders	Officer, Department of Higher Education, Science and Innovations
	Anatolijs Melnis	Senior Expert, Department of Higher Education, Science and Innovations
	Reinis Lasmanis	Officer, Department of Higher Education, Science and Innovations
State Agency of Education Development	Dita Traidās	Director
	Elita Zondaka	Head of the Department of Structural Funds Management and Monitoring
	Agnese Aivare	Head of the Department **ERDF Infrastructure Project Control Department**
	Viktors Kravčenko	Head of Eurydice Programme
	Laura Treimane	Project Coordinator
Ministry of Economics	Vita Skuja	Officer of the Department of Economic Development and Labor Market Forecasts
	Ruta Rimša	Officer of the Department of Economic Development and Labor Market Forecasts
Ministry of Interior	Agnese Laure	Officer at Department of Financial Management, Section of Financial Policy and Methodology

Ministry of Defense	Liene Liepiņa	Head of the Department of Military Education and Science
Ministry of Agriculture	Ilze Slokenberga	Official of Department of International Affairs and Strategic Analysis
Ministry of Environmental Protection and Regional Development	Ēriks Leitis	Senior Expert
Ministry of Health	Inese Andersone	Head of the Department of Coordination of Financial Analysis and Investments
Ministry of Culture	Lolita Rūsiņa	Senior Officer
Ministry of Welfare	Daina Fromholde	Senior Expert, Labour Market Policy
Cross-sectoral Coordination Centre	Elina Petrovska	Consultant
Rector's Conference	Andrejs Rauhvargers	Secretary General
	Janis Bernats	Legal Advisor
	Agnese Rusakova	Expert
Higher Education Council	Janis Vetra	Chairman
Latvia Union of Teachers	Ilze Trapenciere	Representative
Latvia Students' Union	Inguna Zarina	Member
Latvia Confederation of Employers	Ina Sina	National Coordinator in Professional Education and Employment
Latvia Chamber of Commerce and Industry	Aigars Rostovskis	Vice President
University of Latvia	Gundars Berzins	Chancellor
Riga Medicine College of the University of Latvia	Astra Bukulīte	Director
Latvia University of Agriculture	Jānis Sprukts	Chancellor
Riga Technical University	Ingars Eriņš	Chancellor
	Uģis Mālmanis	Deputy Chancellor
Daugavpils University	Inese Kokina	Vice Rector of Science
	Aivars Stankevičs	Researcher

Rezekne Higher Education Institution	Irēna Beinaroviča – Litvinova	Chief Accountant
Ventspils University College	Marina Mekša	Vice Rector
Vidzeme University College	Iveta Putniņa	Administrative Vice Rector
Latvia Academy of Arts	Andris Teikmanis	Associate Professor
Latvia Academy of Culture	Zane Šiliņa	Vice Rector
Latvia Academy of Music	Normunds Vīksne	Vice Rector of Academic Affairs
Latvia Maritime Academy	Jānis Brūnavs	Professor
Riga Stradins University	Tatjana Koķe	Vice Rector of Academic Affairs
Red Cross Medical College (of Riga Stradins University)	Ināra Upmale	Deputy Director in Academic Affairs and Research
Riga Academy of Pedagogy and Education Management	Daina Voita	Vice Rector of Science
Latvia Academy of Sports Education	Andra Fernāte	Vice Rector of Academic Affairs
Transport and Communications Institute	Igors Graurs	Acting Rector
Business Higher Education Institution “Turība"	Aldis Baumanis	Associate Professor
Stockholm School of Economics in Riga	Rita Kaša	Vice Rector
Riga Institute of Aviation	Sandija Zēverte-Rivža	Programme Director
State Police College	Anita Fišere	Head of Education Coordination
State Border Guarding College	Aivars Uzulnīks	Deputy Director
National Information Agency (LETA)	Laura Celmiņa	Reporter

Stakeholder Workshop: 23 April 2014

Institution, organization	**Representative**	**Position**
Parliamentary Committee of Education, Science and Culture	Dana Reizniece- Ozola	Chair of the Committee

Ministry of Education and Science	Sanda Liepiņa	State Secretary
	Līga Lejiņa	Deputy State Secretary, Director of the Department of Political Initiatives and Development
	Gunta Arāja	Deputy State Secretary, Director of the Department of Structural Funds and International Funding Instruments
	Agrita Kiopa	Deputy State Secretary, Director of the Department of Higher Education, Science and Innovations
State Agency of Education Development	Dita Traidās	Director
	Laura Treimane	Project Coordinator
Rector's Council	Andrejs Rauhvargers	Secretary General
	Jānis Bernāts	Legal Advisor
Latvia University	Gundars Bērziņš	Chancellor
Riga Technical University	Leonīds Ribickis	Rector
Latvia Academy of Arts	Andris Teikmanis	Vice Rector, Associate Professor
Latvia Academy of Culture	Zane Šiliņa	Vice Rector
	Rūta Muktupāvela	Chair of Centre for Scientific Research
Vidzeme University of Applied Sciences	Sarmīte Rozentāle	Vice Rector
Ventspils University of Applied Sciences	Gita Rēvalde	Rector
	Marina Mekša	Vice Rector of Finance and Administrative Issues
Rezekne Higher Education Institution	Irēna Beinaroviča - Litvinova	Finance and Planning Department
Liepaja University	Jānis Rimšāns	Rector
	Dzintars Tomsons	Vice Rector for Development
Daugavpils University	Inese Kokina	Vice Rector for Research

Latvia University of Agriculture	Santa Rutkovska	Finance Department
Latvia Academy of Sports Education	Andra Fernāte	Vice Rector of Studies
Riga Teacher Training and Educational Management Academy	Dace Markus	Rector
Latvia Maritime Academy	Jānis Bērziņš	Rector
BA School of Business and Finance	Andris Sarnovičs	Rector
Delegation of the European Commission in Latvia	Mārtiņš Lustiks	Representative
Agency of Commercial Activity and Funding Research	Andris Nātriņš	Director
Stockholm School of Economics in Riga	Nellija Titova	Director of Executive Education and Executive MBA Department
Cross-Sectoral Coordination Centre	Elīna Petrovska	Counsellor at the Department of Development and Assessment Monitoring

Stakeholder Workshop: 8 July 2014

Institution, organization	**Representative**	**Position**
Ministry of Education and Science	Ina Druviete	Minister
	Agrita Kiopa	Deputy State Secretary, Director of the Department of Higher Education, Science and Innovations
	Reinis Lasmanis	Officer at the Department of Higher Education, Science and Innovations
	Jānis Paiders	Officer at the Department of Higher Education, Science and Innovations
	Velta Baseviča	Officer at the Department of Higher Education, Science and Innovations
	Elīna Zariņa	Officer at the Department of Structural Funds and International Financial Instruments

Delegation of the European Commission in Latvia	Inna Šteinbuka	Head of the Delegation
	Mārtiņš Zemītis	Economic Analyst
State Agency of Education Development	Dita Traidās	Director
	Laura Treimane	Project Coordinator
Higher Education Council	Jānis Vētra	Chairman
Rector's Council	Jānis Bernāts	Legal Advisor
Latvia University	Gundars Bērziņš	Chancellor
	Indra Dedze	Project Manager at the Academic Department
Riga Technical University	Ingars Eriņš	Chancellor
	Uldis Sukovskis	Vice Rector for Academic Affairs
Riga Stradins University	Ingrīda Kalviņa	Director of the Department of Development and Projects
	Jeļena Davidova	Director of Finance Department
Latvia Academy of Arts	Aleksejs Naumovs	Rector
	Andris Teikmanis	Vice Rector, Associate Professor
Latvia Academy of Culture	Zane Šiliņa	Vice Rector
Latvia Academy of Music	Toms Ostrovskis	Deputy Director of Study Programs
	Vita Daudiša	Head of Finance Department
Riga Teacher Training and Educational Management Academy	Maira Kocēna	Head of the Development and International Relations Unit
Latvia National Academy of Defence	Skaidrīte Ivanišaka	Methodologist
Daugavpils University	Irēna Kaminska	Vice Rector for Studies
Vidzeme University of Applied Sciences	Gatis Krūmiņš	Rector
Ventspils University of Applied Sciences	Aivars Stankevics	Rector's Advisor

Latvia University of Agriculture	Kaspars Vārtukapteinis	Vice Rector for Studies
	Ilze Stokmane	Head of the Project Department
Latvia Academy of Sports Education	Andra Fernāte	Vice Rector for Studies
Latvia Maritime Academy	Jānis Brūnavs	Professor
Riga International School of Economics and Business Administration	Ilmārs Kreituss	Vice Rector for Studies
	Tatjana Vasiļjeva	Vice Rector for Science
	Ieva Brence	Head of the Department of Economics and Finance
BA School of Business and Finance	Līga Peiseniece	Vice Rector for Studies
Turība University	Aldis Baumanis	Associate Professor, Chairman of the Board
Employers' Confederation of Latvia	Anita Līce	Advisor on Education and Employment Affairs
	Vilnis Rantiņš	Board Member
Latvia Association of Colleges	Juris Gerasimovs	Chair of the Board
Latvia Trade Union of Education and Science Employees	Ilze Trapenciere	Representative
	Rasma Mozere	Representative
Latvia Students' Union	Kirils Solovjovs	President
	Ingūna Zariņa	Officer of Academic Affairs
KOFI	Andris Nātriņš	Director
Riga Stradins University	Ingrida Kalvina	Director of the Development of Project Department
Latvia National Television (LTV)	Līva Rauhvargere	Reporter
National Information Agency (LETA)	Anastasija Teterenko	Reporter