Project Information Document (PID)

Appraisal Stage | Date Prepared/Updated: 08-Dec-2020 | Report No: PIDA30007

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BASIC INFORMATION

A. Basic Project Data

Country Serbia	Project ID P174542	Project Name Serbia Accelerating Innovation and Growth Entrepreneurship Additional Financing	Parent Project ID (if any) P170185
Parent Project Name Serbia Accelerating Innovation and Growth Entrepreneurship	Region EUROPE AND CENTRAL ASIA	Estimated Appraisal Date 11-Jan-2021	Estimated Board Date 23-Dec-2020
Practice Area (Lead) Finance, Competitiveness and Innovation	Financing Instrument Investment Project Financing	Borrower(s) Republic of Serbia	Implementing Agency Ministry of Education, Science and Technological Development

Proposed Development Objective(s) Parent

The project's development objective is to improve (i) the relevance and excellence of scientific research, and (ii) innovative entrepreneurship and access to finance for enterprise growth, as a way of contributing to Serbia's growth and competitiveness.

Relevance of research refers to the potential of research results to be commercialized on the market, thus contributing to the economy, while excellence refers to international recognition of the quality of the research.

Components

Research Sector Reforms Enterprise Acceleration

Project Implementation, Monitoring, Capacity Building

PROJECT FINANCING DATA (US\$, Millions)

SUMMARY

Total Project Cost	32.05
Total Financing	32.05
of which IBRD/IDA	0.00
Financing Gap	0.00

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DETAILS

Non-World Bank Group Financing

Trust Funds	32.05
Trust Funds	32.05

Environmental and Social Risk Classification

Moderate

B. Introduction and Context

- 1. The Serbia Accelerating Innovation and Growth Entrepreneurship Project (SAIGE, P170185), henceforth the parent Project, was approved by the Board of Executive Directors on December 13, 2019 with US\$48 million in financing. It became effective on May 18, 2020, with a closing date of September 30, 2024. Following parliamentary elections and resumption of the work of the Government, Designated Accounts have been opened and the first disbursement, totaling USD 4.18 million (8.7% of the total value of the loan), has been made in the second half of October 2020.
- 2. The Project builds on a decade long cooperation of the World Bank, the European Commission and the Government of Serbia on Serbia's innovation and entrepreneurship agenda, and lessons from previous trust-funded operations (Serbia Innovation Project, P126229 and Serbia Research Innovation and Technology Transfer Project, P145231) and a component in an ongoing lending operation, Serbia Competitiveness and Jobs Project (P152104). This proposed Additional Financing of US\$32.05 million made possible by a European Union grant will enable the scale-up activities in the parent Project in line with approved objectives and support Serbia's post-COVID-19 recovery efforts.

Country Context

- 3. Following years of recession and slow growth, the Serbian economy expanded by 1.8 percent on average over the 2015-2017 period, with a stronger growth of 4.4 percent in 2018 and 4.2 percent in 2019. Growth started to recover after higher investment (average annual growth of 8.3 percent) and strong increases in exports (up 10.7 percent annually in real terms). Consumption recovered, but at a slower pace (1 percent annually in real terms). Growth of the industry and services sectors contributed most to overall growth of the economy between 2015 and 2017, while agriculture had a negative contribution in 2015 and 2017. In 2018 and 2019, growth was broad-based with all three major sectors rising faster than in the period leading up to and including 2017. Labor market performance has improved. According to the Labor Force Survey data, unemployment declined in 2018, and again in 2019, to an estimated annual average of 13.3 percent in 2018 and 9 percent in 2019. Employment rose in 2018 and 2019, however, employment remained lower for women and youth.
- 4. Despite the generally positive fundamental economic outlook the COVID-19 crisis is expected to shrink

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the economy by 3 percent in 2020. Growth thereafter will depend on the management of the health crisis in the near to medium term, the pace of ongoing structural reforms, and progress toward EU accession.

- 5. As of November 2020, the COVID-19 pandemic outbreak and the related containment measures have taken a heavy toll on the Serbian economy, leading to much lower growth than previously expected. The economy entered into a recession in the first half of 2020, driven by lower tourism and transport activity, lower remittances, decelerating exports and lower FDI and investment overall. To mitigate the negative economic impact of the pandemic, Serbian authorities adopted a series of support measures, which in total amounted to approximately 13 percent of GDP. About 40 percent of the package consists of soft loans and guarantees, 30 percent tax deferrals (personal and corporate income taxes), 20 percent a variety of cash supports to businesses, and 10 percent support for individuals.
- 6. Over the medium term (2021-2023) growth is expected to return to its previous trajectory. This medium-term outlook crucially depends on international developments (including the impact of COVID-19), the pace of structural reforms and political developments.
- 7. Current developments are expected to lead to a small uptick in poverty in 2020. Aside from the direct impacts on health outcomes, the anticipated declines in services, lower investments, depressed demand for Serbian exports, and mobility restrictions will hurt jobs and labor income. Poor and vulnerable households may be disproportionately affected.
- 8. As Serbia positions itself for EU membership, and as the COVID-19 crisis refocuses attention on regional and continental trade, increasing competitiveness in the European market remains a priority. A structural shift in Serbia's growth model, driven by increased productivity and higher value added production, is needed to boost competitiveness and spur economic growth. This can be achieved, in part, through enterprise innovation facilitated by increased and more efficient investments in applied research and development (R&D), and, support for research commercialization, enterprise formation, and growth of innovative small and medium enterprises (SMEs).
- 9. Serbia is vulnerable to climatic shocks. Extreme precipitation, extreme temperatures and drought are major climate risks and natural hazards likely to affect Serbia's sustainable development. In 2014, massive floods across Southeast Europe left over 50 people dead in Serbia alone and resulted in damages of over EUR 1.5 billion. At the same time, mean annual temperatures have risen by 0.3°C per decade. Increase in temperatures could lead to severe water shortages and increased instances of heat waves. Significant additional risk comes from an increased frequency of droughts which, according to government estimates, have caused damages of over EUR 3.5 billion since 2000. As a signatory to the Paris Agreement, Serbia is committed to international efforts to avoid dangerous climate change. Serbia pledged to reduce greenhouse gas emissions by 9.8 percent by 2030, from base-year 1990.

Sectoral and Institutional Context

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- 10. Through the parent Project Serbia Accelerating Innovation and Growth Entrepreneurship Project (SAIGE, P170185), Serbia has initiated reforms for a new research and development financing framework, and for testing new support instruments for innovative enterprises. Following good international practice, Serbia has established the Science Fund (SF), an autonomous and professional government institution (based on the Science Fund Law adopted by the Parliament) to implement competitive research funding (comparable to Science Funds, Councils or Agencies in EU member states). The SF addresses key barriers to efficient, sufficient and competitive research financing by serving as a vehicle for (i) increasing R&D funding as a percentage of GDP; (ii) improving the effectiveness of public spending on R&D, by fostering competitive funding that sparks excellence; and (iii) improving business-academia collaboration and, in turn, greater commercialization rates of research. In addition, a model for providing base institutional funding is being introduced through the new Law on Science and Research and associated by-laws.
- 11. Under the parent Project and the proposed Additional Financing, the newly established Science Fund will conduct competitive calls for proposals for R&D grants and rely on independent and expert decision-making based on international peer-review. By supporting high quality basic and applied research, the Science Fund will leverage public R&D spending to connect the supply and demand sides by forging business-academia linkages and also encourage private sector R&D investments. Based on regular evaluation, Science Fund instruments will be adjusted over time to improve their effectiveness and impact. Further, recent tax breaks for R&D investment could boost private R&D spending.
- 12. Current financing levels for innovative businesses in Serbia are also low, pointing to a significant market failure. According to USAID's Serbia Business Survey 2017, 84 percent of small and medium enterprises (SMEs) are financed solely from their own sources. Micro-financing and venture capital investment are impeded by an unclear legal framework, very high costs of deal discovery for investors, and persisting information asymmetries between entrepreneurs and investors about opportunities for investment. Meanwhile, commercial bank loans are accompanied by high requirements for collateral or long history of operations, neither of which young, innovative firms typically possess. Lack of affordable financing, coupled with limited training and mentoring, is preventing Serbian companies from modernizing their production and investing in innovation and commercialization, with young firms and SMEs particularly affected by this.
- 13. The original SAIGE Project is a US\$48 million loan, approved by the Board of Executive Directors on December 13, 2019, and being implemented by the Ministry of Education, Science and Technological Development. It became effective on May 18, 2020, with a closing date of September 30, 2024. Implementation and progress toward achieving project development objectives are currently rated Satisfactory.
- 14. The proposed Additional Financing (AF) in the amount of US\$32.05 million through an EU funded TF for the original SAIGE Project would help finance the costs associated with scaling up activities aimed at reforming the research sector and enterprise acceleration. This Additional Financing builds on a decade long cooperation of the World Bank, the European Commission and the Government of Serbia on Serbia's innovation and entrepreneurship agenda, and lessons from previous trust-funded operations (Serbia Innovation Project, P126229 and Serbia Research Innovation and Technology

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Transfer Project, P145231), a component in an ongoing lending operation, Serbia Competitiveness and Jobs Project (P152104), and the parent Project (P170185).

C. Proposed Development Objective(s)

15. The parent Project's development objective will remain unchanged. It is to improve (i) the relevance and excellence of scientific research, and (ii) innovative entrepreneurship and access to finance for enterprise growth, as a way of contributing to Serbia's growth and competitiveness.

Relevance of research refers to the potential of research results to be commercialized on the market, thus contributing to the economy, while excellence refers to international recognition of the quality of the research.

Key Results

16. Given that the PDO will remain unchanged and that the Additional Financing extends but does not introduce new activities, the results framework, including all indicators, would remain unchanged from the original SAIGE (parent) Project. However, the result targets will increase to account for the Additional Financing, including the PDO-level results targets. Thus, the number of scientific publications in top 10 percent of internationally recognized journals is expected to increase from 1100 to 1150 (with a baseline of 1000), while the number of collaborative applied research projects is expected to go up from 150 to 250 (with a baseline of 0). On the enterprise growth side, we expect that external investment generated by companies will go up from the previous target of USD 4 million to USD 7 million, and that the number of new or improved innovative products or services will increase from 50 to 70 as the target. While the Additional Financing significantly increases resources available, it should be noted that expected results are not directly proportional to the additional amounts allocated.

Complementarity with the World Bank Group COVID-19 Crisis Response Approach

- 17. The Bank Group's COVID-19 response approach has four thematic pillars:
 - a. saving lives through support for health interventions;
 - b. protecting the poor and vulnerable from economic and social crisis impact of the pandemic;
 - c. saving livelihoods through economic response for preserving jobs and ensuring more sustainable business growth; and
 - d. strengthening policies, institutions and investments for resilient and sustainable recovery.

The proposed Additional Financing principally responds to the third and fourth pillars, although the first pillar will also be supported through specialized activities.

18. The emergency COVID-19 program of the Science Fund will contribute to pillar three by financing critical clinically relevant projects, including vaccine and treatment development, which will support jobs of clinicians and medical scientists, as well as social scientists work on COVID-19 related projects. The same program will contribute to pillar four, by ensuring the ability of medical institutions to act as a key pillar to a

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sustainable recovery, by researching and providing effective treatments and prevention measures, and documenting lessons.

- 19. The Innovation Fund enterprise acceleration program will also contribute to pillar three by supporting jobs created by innovative enterprises, and pillar four, through the provision of crisis resilience training to these enterprises. The crisis resilience training will use examples of health and other (e.g. climate-related) crises that are likely to trigger demand and supply shocks or other constraints. The Innovation Fund's COVID-19 program, launched from government budget resources in March 2020, may also be supported through the Project if another round is deemed necessary; the first round financed the development of devices, from ventilators, to masks and sanitizing equipment, along with software solutions for improving public health and clinical operations.
- 20. Finally, the institutional and governance reforms for Serbia's innovation system as a whole include RDI transformation, and improved Science Fund and Innovation Fund governance and M&E systems. These support the fourth pillar of the Bank's COVID-19 approach, and are explicitly aimed to increase sustainability as well as adaptability of the country's researchers and entrepreneurs in order to better respond to changing conditions, including crises, with market-relevant innovations.

D. Project Description

21. The parent Project (SAIGE, P170185) was approved by the Board on December 13, 2019. It became effective on May 18, 2020. A brief description of its components is provided here.

Component 1: Research Sector Reforms (EUR 34 million)¹

Subcomponent 1.1: Serbia Science Fund (EUR 22.5 million)

22. This subcomponent will finance grants to be awarded by the Science Fund through a number of competitive programs, including IDEAS (main program for basic and applied research), PROMIS (for young researchers), COVID-19 (emergency program for COVID-19 related research), AI (for research in artificial intelligence), and others, including programs that will incentivize public-private collaboration, involvement of diaspora researchers, and cooperation with EU programs (e.g. Horizon 2020, Horizon Europe, etc.). It will also support the design of each of these programs, as well their M&E systems. Finally, it will provide technical assistance (TA) on institutional governance and related matters to the Science Fund itself, which, as a new institution, is still in the process of learning from international good practice.

Subcomponent 1.2: RDI Reforms (EUR 8 million)

23. This subcomponent will support the design and implementation of institutional transformation plans for selected RDIs, following internal (self-administered) and external (independent) assessments. It will include reforms of at least four (4) public R&D Institutes (RDIs) by providing incentives for undertaking institutional reforms on a voluntary (opt-in) basis. This will build upon the successful technical assistance experience under the completed Serbia Innovation Project and Serbia Innovation and

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¹ Please note these refer to the amounts originally approved for the SAIGE Project loan.

Technology Transfer Project, both financed by the EU and supported and implemented by the Bank; and on the RDI assessments supported by the Bank Competitiveness and Jobs project (P152104).

Subcomponent 1.3: Serbian Diaspora Facility (EUR 3.5 million)

24. The subcomponent will support establishment of a Serbian Diaspora Facility (SDF) within the Science Fund to finance technical assistance and provision of grants to scientists, researchers, entrepreneurs and Serbian diaspora to transfer knowledge and skills from the diaspora community back to the country.

Component 2: Enterprise Acceleration (EUR 7 million)

- 25. This component is designed to build on existing programs of the Innovation Fund (IF), which has been supported by the World Bank and the EU since its founding, over a decade ago. The IF is frequently cited by the EU as a "good practice" example of support to small and medium companies developing innovative products or services. However, neither the IF nor any other institution in the Western Balkans have offered a true "acceleration" program, which consists of intensive mentoring and coinvestment grants. Thus, this component will assist the IF to design and implement such a program, in partnership with other innovation ecosystem partners (funds, hubs, labs, universities, etc.), and to offer knowledge sharing with other entrepreneurship support organizations interested in providing acceleration programming. The component includes:
 - A Co-Investment Fund to provide Matching Grants for the financing of investments and technical assistance to Selected Companies (up to EUR 4.5–5.5 million in total over four years).
 - b. A TA (EUR 2 million over four years), to support, competitive selection of companies, program and curriculum design and implementation, angel group/network creation and deal flow development, training for existing entrepreneurship hubs on acceleration and growth-financing, establishing linkages with international angel and VC networks (including the diaspora), and regulatory analysis.

Component 3: Project Implementation, Monitoring, and Capacity Building (EUR 2 million)

26. This component finances activities related to project implementation and monitoring, including the operations of a Project Implementation Unit (PIU), established at the MoESTD and part of the operating costs of the Central Fiduciary Unit (CFU), already established at the MOF. This will include operational and fiduciary (procurement, environmental and social safeguards), M&E, project audits, studies, policy/program design and capacity building support to the MoESTD, Science Fund, Innovation Fund and selected RDIs.

Description of Additional Financing

27. The Additional Financing would scale-up the activities under the parent project, with a focus research sector reforms and enterprise acceleration. The AF introduces changes solely to the amounts to be disbursed and the respective results targets for two components. The Additional Financing would not change the Project Development Objective, components or activities. Further, the Additional Financing would be disbursed through the same programs described in Components 1 and 2 under the SAIGE Project. Thus, with the Additional Financing, the programs described would

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be financed by a combination of IBRD loan proceeds and EU IPA 19 proceeds, through the SAIGE Project. All implementation arrangements would remain the same.

- 28. This Additional Financing would total EUR 28.5 million, allocated as follows:
 - 1) Component 1: EUR 23.5 million would support grants, including EUR 17 million for the Science Fund grants and EUR 6.5 million for the RDI programs, in addition to EUR 31 million from the SAIGE Project loan.
 - 2) Component 2: Approximately EUR 5 million would support co-investment (matching) grants for early stage companies (EUR 5 million), administered by the Innovation Fund, in addition to EUR 5 million from the SAIGE Project loan.

Legal Operational Policies	
	Triggered?
Projects on International Waterways OP 7.50	
Projects in Disputed Areas OP 7.60	
Summary of Assessment of Environmental and Social Risks and Impa	acts

Assessment of Environmental and Social Risks and Impacts

29. The Additional Financing has the same PDO, components and institutional arrangements as the parent Project (P170185). Thus, the environmental and social risks have been assessed to be the same for both. The project will enhance the capability of research organizations in Serbia to effectively target, select and monitor research activities and create a stronger linkage between research and firm innovation. These activities are generally anticipated to have positive impact on the research community and beneficiary private sector firms. The technology innovations to be supported through the firm grant scheme will be screened and adhere to guidelines aligned with the Environmental and Social Management Framework (ESMF).

E. Implementation

30. No changes to the institutional and implementation arrangements are foreseen. Thus, as in the parent Project (P170185), a Project Implementation Unit will operate under the Ministry of Education, Science and Technological Development, while the Science Fund and the Innovation Fund will act as Project Implementing Entities. The Central Fiduciary Unit will handle procurement and fiduciary management.

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