



BDB – a Class A shareholder in the Three Seas Initiative Investment Fund



TOMORROW'S INFRASTRUCTURE

EXPECTED EFFECTS OF TARGETED AND COORDINATED ENCOURAGEMENT OF INVESTMENTS IN CONNECTING AND NATIONAL TRANSPORT, COMMUNICATION AND DIGITAL INFRASTRUCTURE IN THE THREE SEAS INITIATIVE ECONOMIES ON THEIR SUSTAINABLE POST-PANDEMIC RECOVERY, AND ON ACCELERATION OF THEIR REAL AND STRUCTURAL CONVERGENCE TO THE EU15

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1. Introduction and background

The different paths of economic recovery and development in Europe after the end of the World War II led to substantial imbalances in infrastructural connectivity between the western and eastern parts of the continent. It resulted both from the intended policies of the Soviet leadership and from the economic inability of the USSR and the stateplanned economies within the COMECON to keep up with the USA and the European Common Market. The countries in the Soviet block remained underdeveloped and with limited connecting infrastructure until the end of the Cold War and into the nineties. Following their accession to the European Union public investments targeted initially the development of the transport corridors connecting the East with the West whilst a noticeable lag persisted in developing connecting infrastructure between the new EU member states. This is an obstacle to realising the full economic potential of the countries in Central and Eastern Europe (CEE) as well as to their economic convergence to the more developed parts of the EU up until now and in the longer term.

To address that fundamental development problem and seek viable and sustainable solutions to it, in 2016 in Dubrovnik eleven of the new EU member countries – Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia and Slovenia together with Austria issued a joint statement at the level of their heads of state by which they "endorsed The Three Seas Initiative as an informal platform for securing political support and decisive action on specific cross-border and macro-regional projects of strategic importance to the States involved in energy, transportation, digital communication and economic sectors in Central and Eastern Europe". The Three Seas Initiative of the EU member states situated between the Adriatic, Baltic and Black Seas was launched. Its prime goal was and remains the acceleration of the economic development and convergence of the Central, Eastern and Southeastern Europe (CESEE) economies to the more developed western economic regions of the EU by coordinated efforts aimed at closing the gap in connectivity, digitalization, energy and transport infrastructure. It has become apparent that only together financial resources for investing in interconnecting strategic projects can be mobilised from both public and private sectors. In his address to the plenary session of the Bucharest Summit in 2018, the EU Commission President Jean-Claude Junker endorsed the Three Seas Initiative 'as catalyst for the cohesion and convergence of the EU and for the strengthening of the transatlantic link'.¹

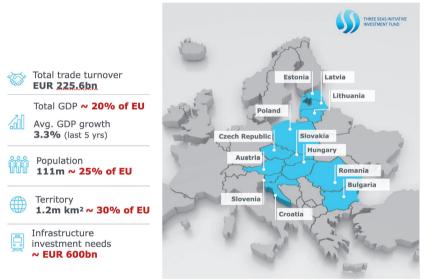


Figure 1: The Three Seas Initiative economic potential²

The United States have also endorsed the Three Seas Initiative from the start. President Donald Trump's first European visit was to Poland for the Three Seas Summit hosted in Warsaw in July 2017. Former U.S. Energy Secretary Rick Perry represented the United States at the Three Seas summits in 2018 and 2019. The new Biden Administration have also declared strengthening the support of USA to the Initiative.

Address by the President of the European Commission Jean-Claude Juncker to the Plenary session of the 3SI Bucharest Summit, 2018

² Source: The Three Seas Initiative Investment Fund – 3SIIF, Amber Infrastructure

3SI Infrastructure Interconnection Projects

Five yeas after the Summit in Dubrovnik the countries under the Initiative have compiled together a list of 90 interconnecting infrastructure projects grossing an estimated investment value of €180.9 billion. If in 2020, when the coronavirus crisis hit all parts of Europe, only 12% of the necessary funding for the 3SI Priority Projects was marked as secured in 2021 some 53% of the total budget for all infrastructure interconnection projects was reported as secured predominantly from national and EU sources. The 3SI Status Report for 2021 acknowledges this as 'a clear sign of the potential and the capacity of the region and the economies under the Three Seas Initiative to attract and combine successfully national, European and other sources of funding for investment in connectivity and infrastructure.' The Status Report also shows that the bulk of the funding for the currently registered 90 3SI Projects is expected to come from national and EU sources to the volume of up to 65%.

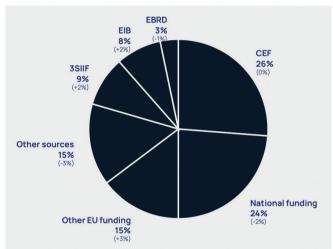


Figure 2: Proposed financing for 3SI Priority Interconnection Projects as of June 2021³

Launch of the Three Seas Initiative Investment Fund - 3SIIF

In order to bridge the connectivity gap by complementing the national and EU public investments in infrastructure across the 3SI countries with private capital the creation of an equity investment fund under the Initiative was promoted during the 2018 Bucharest Summit. In May 2019 the Three Seas Initiative Investment Fund (3SIIF) was registered in Luxembourg by the Polish Development Bank (BGK – Bank Gospodarstwa Krajowego) committing €500 million and the EximBank of Romania with €20 million. Between September 2020 and January 2021 six other state-owned national promotional financial institution from

^{3 3}SI projects Status Report 2021, https://projects.3seas.eu/report

Bulgaria (Bulgarian Development Bank), Croatia (Hrvatska banka za obnovu i razvitak – HBOR), Hungary (EXIM), Latvia (Altum), Lithuania (Viešųjų investicijų plėtros agentūra – VIPA), Slovenia (Slovenska izvozna in razvojna banka – SID Banka) and the Estonian Ministry of Finance mandated by their national governments joined 3SIIF. SID Banka committed €23 million to the Fund's capital whilst all others subscribed €20 million each. With an additional commitment of €250 million made by the Polish BGK in 2021 the total capital of the 3SIIF has reached €913 million.

FINANCIAL COMMITMENT BY COUNTRY		
POLAND (€750 MILLION)	SLOVENIA (€23 MILLION)	
	LITHUANIA (€20 MILLION)	CROATIA (€20 MILLION)
	BULGARIA (€20 MILLION)	HUNGARY (€20 MILLION)
	LATVIA (€20 MILLION)	ROMANIA (€20 MILLION)
	ESTONIA (€20 MILLION)	

Figure 3: Equity commitments to 3SIIF⁴

Shareholders have appointed Amber Infrastructure Limited as the exclusive investment adviser of the 3SIIF. The Fund will operate on a fully commercial basis and will remain open to both public and private investors.

At the Tallinn Summit in October 2020 Keith Krach, U.S. Under Secretary for Economic Growth, Energy, and the Environment, revealed the plans of the U.S. International Development Finance Corporation (DFC) to provide at least \$300 million to the 3SIIF or about 30% of the amount committed by the other sponsors of the Fund. The U.S. Administration has further agreed to extend the pledge to \$1 billion on the 30 percent principle, meaning as investments snowball to around \$3.4 billion, the U.S. contribution shall reach \$1 billion. This is in line with the statement made by U.S. Secretary of State Mike Pompeo at the Munich Security Conference in March 2020.

In their discussion paper 'Building bridges across the Three Seas' published by the Atlantic Council in November 2020 the representatives of Poland, Hungary, Romania, Bulgaria and Estonia to the International Monetary Fund Piotr Trabinski, Daniel Palotai, Liviu Voinea,

⁴ Source: 3SIIF; Georgiev Y., 'The Three Seas Initiative and South East Europe – striking a balance between ambition and reality', EPI Quarterly Policy Brief, vol.1, issue 1/2021

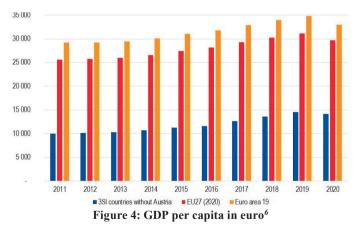
Tsyetan Manchey, and Nils Vaikla This concluded: 'The United States has already pledged an important investment in 3SI infrastructure projects, seeking to advance the cross-country connectivity prospects in the region... This, together with the recent EU recovery plan, is paramount for successfully closing the infrastructure gap in the region. The 3SI has the potential to become an infrastructure-driven framework to promote development, security, and integration in our region.³

Specifics of the economic development and convergence in the 2. new EU member states participating in the Three Seas Initiative

Factors affecting economic growth in the Three Seas Initiative countries

Economic growth has been strong in the new EU member states since their accession. The area between the Adriatic, Baltic and Black Seas has been a force for higher growth in Europe with noticeably better performance and macroeconomic stance compared to EU15 particularly in the period after the Global Financial Crisis of 2007-2008 and the subsequent multi-vear European Debt Crisis. Notwithstanding the remarkable economic success of the new member states in CESEE over the last 15 years convergence to EU15 has remained lagging in terms of GDP per capita, incomes, structurally and in overall, contrary to the initial expectations before and at the time of accession.

In 2019 the regional GDP per person employed varies from €12,700 in the North Central region of Bulgaria to €205,500 in Southern Ireland compared to the EU average of €66,800. This labor productivity measures the overall productivity of regional economies without adjusting for differences in price levels or average hours worked (Eurostat, 2021).



Trabinski P., Palotai D., Voinea L., Manchev T., & Vaikla N., 'Building bridges 5 across the Three Seas', Atlantic Council, November 23, 2020 6 Source: own calculation based on data by Eurostat

Growth drivers and factors of productivity

In the period before the Global Financial Crisis main drivers of growth for the Three Seas economies were total factor productivity (TFP) and capital accumulation. The economic slowdown after the crisis was mainly due to slower growth in multi-factor productivity. As a result, economic growth in the CESEE region has become more linked and dependent on capital accumulation, especially in the new non-euro area EU member states where the contribution of capital accumulation has become clearly the major driver of growth. In contrast, in the new euro area countries TFP remained the main driver of economic growth and development. (Piotr Żuk, 2018)

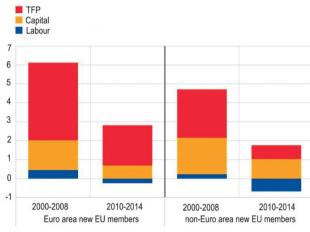


Figure 5: Main contributors and factors for growth⁷

According to an ECB study of April 2018 (ECB Francesco Chiacchio, 2018) the main factor for the decline in TFP growth in CEE countries in the previous post-crisis period has been the reduction of innovation and technology uptake in companies in the region, most likely caused by a decline in R&D investments coupled with a delay in the technology transfer from parent companies. The contraction of foreign direct investments (FDI) in the post-crisis period has also contributed to these trends. The new member states relied mainly on EU funds during the recovery period and reduced their capital expenditures as a result of the crisis and the austerity consensus in EU policy after it. Reducing capital expenditures has further slowed the economic development of the new member states. Against this background, high levels of investments seem essential for convergence towards the higher-income EU economies. Low capital stocks affect negatively company innovation and investment activity as well as the development and the quality of infrastructure which both hamper long-term growth prospects.

⁷ Source: own calculation based on data by Eurostat

Impact of shortfalls in connectivity and infrastructure

Inadequate connectivity and infrastructure expectedly create and exacerbate socio-economic and trade imbalances between member states. According to the World Economic Forum (Figure 6) the transport infrastructure in the countries participating in the Three Seas Initiative remains at a substantially lower level and quality compared to the old EU15 member states due to the fact that pace of infrastructural development is persistently insufficient to close the gap. The most noticeable and concerning is the shortfall in Bulgaria and Romania.

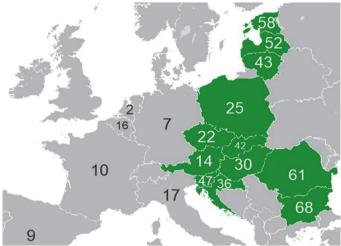


Figure 6: WEF Transport Infrastructure Development Ranking (from 1st to 141st place)⁸

Aiming to secure adequate funding in order to achieve the necessary degree of connectivity between the new and old EU member states European legislators and the Council adopted in 2013 a substantial revision to the regulations guiding the Trans-European Transport Network (TEN-T) policy⁹. The concepts of 'Core Network' and 'Comprehensive Network' are introduced. The Core Network includes the most important connections linking the most important nodes and is to be completed by 2030. It consists of those parts of the comprehensive network that are of the highest strategic importance for achieving the TEN-T objectives. In parallel, the Comprehensive Network covers all European regions and is to be completed by 2050. Its aim is to ensure accessibility and connectivity for all EU regions.

Following the TEN-T policy and regulatory revisions of 2013 and 2017 EU policy has shifted towards a multimodal network approach across the EU with logistics as a focal point linking and interconnecting road, rail, inland waterways, maritime and air transport. EU legislators have also called for an urgent and more efficient integration of

⁸ Source: World Economic Forum

⁹ The current TEN-T policy is based on Regulation (EU) No 1315/2013

transport modes, and a better training and job conditions to attract new professionals.

The degree of completion of the TEN-T plans varies greatly from one EU member state to another. The countries with lower levels and slower project implementation mainly fall in the geographic area of the Three Seas Initiative. They do not receive enough funds to implement the programme which at the same time does not include strategic projects for some of the member countries such as the Hemus Highway in Bulgaria.

In this context further study, surveys and discussions are recommendable to attest the extent to which the TEN-T network of 10 transeuropean transport corridors is sufficiently well defined to address all connectivity gaps and needs of the 3SI economies. Or it may have to be extended accordingly with the definition of an eleventh corridor to address the exiting disparities in connecting infrastructure in the 3SI region and attend to the rising needs of the 3SI economies for faster access, more efficient and greener transportation, and shorter multi-modal routes and links between the Baltic, Black and the Eastern Mediterranean Seas and the Suez Canal.

Investments in Infrastructure and Economic Recovery

In September 2020 the International Monetary Fund (IMF) published a report on "Infrastructure in Central, Eastern, and Southeastern Europe: Benchmarking, Macroeconomic Impact, and Policy Issues". According to IMF analysis closing 50% of the infrastructure gap until 2030 would require an annual investment of 3-8% of GDP and for each percent of GDP spent on infrastructure, the output could rise by 0,5-0,75% in the short run and by 2-2,5% in the long run. The research shows how better public investment can help repair the economic damage of the pandemic, raise potential output and speed income convergence with the EU15. Such coordinated policy would also support the transition to a greener and digitally intensive economy. The expectations are that if the efficiency of public investments in infrastructure and connectivity in the 3SI countries increases to the EU15 level and financial programming and project planning is coordinated then economic output will almost double in the long run.

Historically, the successful and lasting recovery from a systemic economic crisis has been accompanied if not driven by substantial public investments in infrastructure and connectivity. However, that was not the case nor the policy consensus in Europe after the Global financial crisis of 2007-2008 followed by the European debt crisis of 2009 which lasted for several years. The outcome was a sluggish recovery often insufficient to overcome the persisting macroeconomic divergence between some European countries and regions before the current socio-economic crisis caused by the coronavirus pandemic unrolled.

To tackle the economic challenges brought about by the coronavirus pandemic the European Union has launched the Recovery and Resilience Facility (RRF) which is the largest component of the Next Generation EU (NGEU) programme. EU member countries have to submit national recovery and resilience plans that describe the reforms and public investment projects they plan to implement with the support of the RRF.¹⁰

Some €205 billion of grants and financial instruments provided through NGEU/RRF have been earmarked for the new EU member countries participating in the Three Seas Initiative. Of the ten economies which will receive most resources from the facility as a percent of their GDP seven are 3SI countries – Bulgaria, Croatia, Romania, Latvia, Slovakia, Lithuania and Poland (Figure 7). Greece which is also among the top 10 beneficiaries of the RRF/NGEU has been invited by the Bulgarian President Rumen Radev to participate as a guest in the 2021 3SI Summit in Sofia where the country will be represented at the highest rank by the Greek President Katerina Sakellaropoulou.

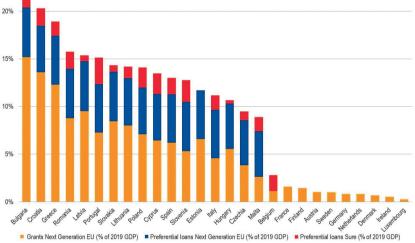


Figure 7: NGEU/RRF allocations per country as percent of GDP¹¹

The resources provided under the NGEU/RRF will not only support economic recovery for the individual countries and the Union as a whole but at the same time will be instrumental in advancing and accelerating the Green Transition and Digital Transformation of the national and the EU economies. Such prioritisation matches naturally the goals and priorities of the 3SI for achieving a sustainable and inclusive economic growth via investing in infrastructure and connectivity accordingly. There is also a fit with the priorities of the 3SIIF and the conditions under which DFC can support the activities of the Fund. All this suggests that effective communication and coordination between

Darvas Z., Domínguez-Jiménez M., Grzegorczyk M., Guetta-Jeanrenaud L.,
Hoffmann M., Lenaerts K., Schraepen T., Tzaras A. and WeilBreugel P. (2021) 'European Union countries' recovery and resilience plans' Breugel
Source: Bloomberg, own calculations

the national and EU administrative bodies charged with responsibilities to plan, implement and monitor the national recovery and resilience plans in the 3SI EU member countries is essential and of a growing importance for the progress and the successful achievement of the main 3SI goals.

3. The role of the Three Seas Initiative Investment Fund and private capital in supporting infrastructural development and catalysing economic convergence

Attractiveness to investors and market opportunities

With its gross trade turnover of over €225 billion, total GDP at close to 20% of the entire EU economy, population of 111 million or 25% of EU, and strategically located territory of 1.2 million sq.km or 30% of EU, the Three Seas region provides a unique investment opportunity being among the fastest growing regions in Europe with an average forecast GDP growth above the rest of the EU. It offers to investors and private capital an attractive combination of high growth typically seen in emerging markets with significant levels of economic and political stability found in more mature markets (Figure 8).

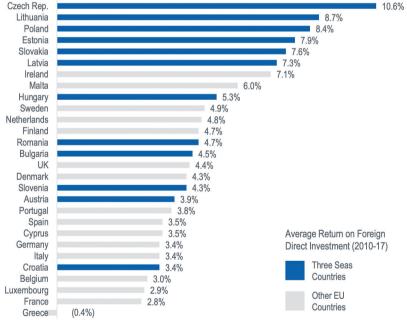


Figure 8: Returns for foreign direct investments in EU¹²

At the same time and as discussed previously there is still a significant gap relating to the quality and availability of infrastructure amounting to more than €500 billion (Figure 9). Over the last 15 years,

¹² Source: 3SIIF

structural funds from the EU played a key part in financing infrastructure investments across the region. However, this source of funding cannot cover the entire gap over the next EU Multiannual Financial Framework 2021-2027 (MMF) leaving much space and opportunity to private capital and institutional investors with appetite for longer-term infrastructure assets. There are many natural synergies between the public, EU and 3SIIF investments in infrastructure which add to the attractiveness of the Fund's strategy to private capital and institutional investors within and beyond the European Union.

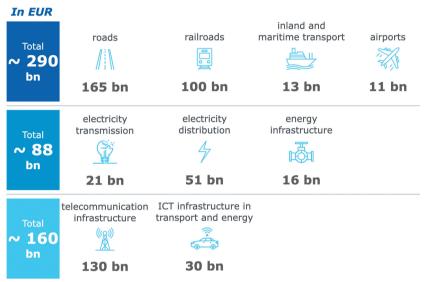


Figure 9: Three Seas Region Infrastructure investment needs (until 2030)¹³

3SIIF objectives, investment criteria, target sectors and themes

Three Seas Initiative Investment Fund (3SIIF) is at present limited to investing in the eleven CESEE countries participating in the Initiative. Austria as a developed EU economy is outside of the geographic scope of the 3SIIF investment operations. The sectoral allocation of the capital is set at 40% for energy, 40% for transport and 20% for digital infrastructure (20%). The investments are required to be in supply-critical, long-term asset with a minimum equity commitment of \in 50 million and a maximum up to \in 250 million. The time horizon of the investments should be up to 15 years with a possible extension of 5 years and a standard target return for such equity positions in infrastructure which is in the range between 12% and 15%. The Fund seeks ownership in the invested projects of controlling or significant minority stakes with board representation and effective governance provisions. The Fund targets investments that improve connectivity and cooperation throughout the Three Seas region, accelerate economic develop-

¹³ Estimates; Source: 3SIIF, Amber Infrastructure Group, SpotData, 2019

ment by expanding state-of-the-art infrastructure, support supply-critical long-term assets. The preference is for greenfield infrastructure or existing assets with expansion and modernisation plans.

To achieve its objective the 3SIIF targets assets with regulated or contracted revenue streams with high quality counterparties, possessing high barriers to entry due to market or structural protection and have high visibility of cashflows. Their revenue streams should be preferably inflation-linked. Substantial growth or expansion potential coupled with high quality management team ready to deliver growth are essential. The fund managers will always seek and give preference to projects with strong ESG credentials and a responsible approach to environmental aspects which have a limited sensitivity to economic cycles.¹⁴ The Fund will not make investments in coal or nuclear generation assets.

The predicted size of the Fund is in the range of €3-5 billion which can allow it to drive and catalyse total investments in infrastructure and connectivity of up to €100 billion over its expected live cycle. In its first year of operation led by its independent fund manager Amber Infrastructure 3SIIF has reviewed 131 opportunities identifying 32 in transportation, 61 in energy and 38 in the digital sector. The first three investments made to date are in high quality large scale projects in each of the three sectors of focus for the Fund's operations - in transport with the acquisition of Cargounit which is the largest locomotive leasing company in Poland and is also the sixth largest rolling stock company in Europe; in clean energy acquiring a significant interest in Enery Development GmbH which is an operations-led renewable energy developer with solar-power generation assets and renewable energy project pipeline in Bulgaria, the Czech Republic, Romania and Slovakia; in digital infrastructure with the acquisition of a controlling interest in Greenergy Data Centers, a CEE data centre platform based in Tallinn. Estonia.

Conclusions and options for the future

More capital in 3SIIF

The Three Seas Initiative Investment Fund is currently the only permanent body within the Three Seas Initiative. Over 80% of its current capital is provided by one national development bank. Three of the 3SI countries namely Austria, the Czech Republic and Slovakia have not yet committed capital to the Fund. Increasing the 3SIIF capital and drawing in private capital as well as contributions from countries outside the Initiative but with a strong organic interest in it will be detrimental to the advancement of the 3SI economic agenda. It would be of paramount importance to addressing timely some of the core economic

¹⁴ Source: 3SIIF, Amber Infrastructure Group

challenges in the 3SI region with regard to closing the gap in digitalisation, innovation and smarter green transition.

Infrastructure for innovation

Adjusting the 3SIIF sectoral allocation proportions to allow more flexibility and capacity for investing in digital infrastructure, data security and digital transformation is recommended. The study of Growth drivers and factors of productivity discussed above shows that some of the main risks for long-term growth prospect and economic convergence in the 3SI region are related to lagging public and private investments in innovation and technology transfers for higher productivity. Other recent studies have shown the substantial disparity and divergence in the levels of competitiveness between small and medium business which have intensified the utilisation of digital tools and services in their processes and those who have not during the coronavirus pandemic. Digitalisation and accessible digital infrastructure is seen as the new fundament and catalyst for innovation, smarter energy, transportation and business environment in the 3SI. Instead of the original sectoral quota limits of 40% transport / 40% energy / 20% digital a more flexible guidance could be discussed based on the premise that no sectoral quotas are set but no sector could absorb more than 40% of the Funds equity.

Coordination with regard to programming public investments and EU resources

Operationalising the communication between the national administrations in the 3SI countries and the EU institutions to coordinate proactively the programming and planning of national and EU resources for funding priority infrastructure projects would be essential for the longer-term success and delivering on the Priority Projects list. At the same time the definition of 'Priority Interconnection Projects' need to evolve and be specified more precisely so it can serve the purpose of prioritising both with regard to timeframes and synergies.

Specific role of national and multilateral development banks

National promotional financial institutions (NPIs) and International financial institution (IFIs) are uniquely positioned to leverage the efforts of both public administrations and 3SIIF by utilising their quasi-sovereign status and high credit ratings to channel funds and structured credit solution with extended maturity for bankable projects with regard to infrastructural investments alongside 3SIIF. As development banks, both national and multilateral, are mission and mandate driven they are in position to offer long-term finance to priority projects with sound business models especially when equity investments by 3SIIF are inapplicable or may not be appropriate due to various legal constrains or specifics of strategic assets. Fiscal resources should be deployed only when no other means of financing would work, yet, a particular priority project is of prime strategic and socio-economic importance and consensus.

Evidence-based and data-driven approach

To support all of the above and assist 3SIIF and all other 3SI stakeholders with research and evidence-based policy analysis as well as promote 3SIIF by extending its footprint and improving the awareness of its existence and activities among the investment, business and wider communities the creation of a Three Seas Institute for Development (3SID) could be discussed between the 3SIIF shareholders and other 3SI stakeholders. Such knowledge-centre serving the Fund and the various activities under the Initiative should not be created as an administrative body but operate as a network of economists, other specialists and researchers from various countries with strong expertise in the relevant to the 3SIIF focus areas. The 3SID will help adopt an evidence-based and data-driven approach to policy formulation and to defining specific priorities throughout the scope of 3SI activities. In cooperation with other such international research bordies, academic centres and thinktanks 3SID can become instrumental in expanding the 3SI social footprint and engaging into the dialogue the next 3SI generation.

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