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A Distributed Ledger Technology Roadmap for Albania: Some Preliminary Reflections

Marc Pilkington, Erdita Kumaraku, Kejsi Bushi, Katia Haveri
Faculty of Economics and Administrative Sciences, Epoka University, Albania

Correspondence: mpilkington@epoka.edu.al

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Abstract

Albania is a small country of the West Balkans situated in Southeast Europe still in the early stages of distributed ledger technology (DLT) adoption. In this research note, we begin to investigate the cryptocurrency regulatory framework and propose a national blockchain roadmap for the country. Albania was one of the first European nations to elaborate a cryptocurrency regulatory framework aimed at safeguarding users from the dangers of fraud and imposing sanctions in situations of misuse. Our proposed national blockchain roadmap includes emerging priorities such as licensed entities, digital divide reduction, remittances digitisation, Ethereum 2.0, blockchain FDI, e-voting, and the quadruple helix system.

Keywords: *Distributed ledger technology, Albania, regulatory framework, national roadmap*

JEL Classifications: O14, O31, O33, O38, P27

1. Introduction

The Republic of Albania is a small country populated by 2.845 million inhabitants (in 2020 [1]) situated in the West Balkans. Seldom featured in the global payment innovation headlines, let alone in the distributed ledger technology (DLT) landscape, the time is ripe, however, for the publication of pathbreaking research tackling the untapped technological potential of one of the fastest growing emerging economies in South-Eastern Europe that has since June 2014 been an official candidate for accession to the European Union.

Challenges posed by unlocking opportunities for socio-economic development are numerous and significant as around 60% of the adult population remain excluded from the traditional banking sector [2] with a corollary, the persistent heavy reliance on cash. In a joint survey titled “The Retail Payment Costs and Savings in Albania”, conducted by the Bank of Albania and the World Bank [3], it was found that cash, as the most used payment instrument, is also the most expensive, costing around 1.7% of the Gross Domestic Product on a yearly basis [4].

In this research note, we investigate the Albanian regulatory framework in Section 2, and we sketch out the bullet points of a novel DLT national roadmap for Albania in Section 3. Finally, we conclude in Section 4.

2. The Albanian regulatory framework

The Law “On Securities” No. 9879 and by-laws issued on 21 February 2008 by the Financial Supervisory Authority (FSA) recognises only two types of money-making instruments for funding purposes, namely bonds and shares, issued either through private offering or IPO, and necessitating the submission of a document called “Prospectus”, whereby investment risks are disclosed. It follows that the Albanian legal framework does not contain provisions for International Coin Offerings [5]. Yet Albania was one of the first European countries to adopt a regulatory framework for cryptocurrencies, aimed at protecting users from the risks of fraud, and impose fines in cases of abuse [6].

Law No. 66/2020 “On Financial Markets based on Distributed Registry Technology”, containing 107 articles, regulates the licensing of entities operating in the field of cryptocurrency trading and the issuance of digital tokens for which a relevant licence from the Bank of Albania is mandatory [6]. Yet, to date, no such licensed entities are operating in Albania [7]. However, seven trusted exchanges including Bitpanda, Binance, and Kraken, are available to Albanian users. The most popular cryptocurrency wallets in Albania are Coinbase, Ledger Nano X, and Electrum [8].

The 2020 law was criticised notably for some shortcomings in Anti-Money Laundering Measures and the Financing of

Terrorism, paramount for Albania on her path to EU membership. The Council of Europe notes, however, that Albania has “improved measures to combat money laundering and terrorist financing, demonstrating good progress in the level of compliance with the Financial Action Task Force standards, the Council of Europe’s anti-money laundering body” [9].

2020 also marked an important year for the Albanian payments market. On 30 April, the Law “On Payment Services” was approved by the Parliament. The adoption of this Law, a transposition of the European Union’s Second Payment Services Directive (PSD2), was a multidimensional achievement for the Bank of Albania with significant progress accomplished in the process of EU integration, within the Single Euro Payment Area (SEPA). Albania becomes the first Western Balkan country to transpose PSD2 into their national legislation. Newly enacted rules aim to improve financial inclusion, reduce the costs of payment services by fostering competition, and encourage the use of digital payment instruments [4].

In June 2022, the Parliament drafted a resolution asking the Albanian Financial Supervisory Authority (AFSA) to approve new regulatory acts on DLT before the end of the year. The draft law provides a definition of a virtual asset: “a digital representation of a value that can be deposited, traded or transferred in digital form, and that can be used for payment or investment purposes or as a medium of exchange, including but not limited to cryptocurrencies” [10].

3. A blockchain roadmap for Albania

The absence of licensed entities per se in Albania notwithstanding the existence of trusted currency exchanges [8] and a full-fledged regulatory framework [6] denotes either the existence of an untapped market or a lack of responsiveness of the economy to recent regulatory changes. **Progress in this domain should help attract more DLT investment in the future.**

In 2019, Natasha Ahmetaj, the Second Deputy Governor of the Bank of Albania, issued a press release [5] wherein she praised the foundations upon which the DLT Albanian ecosystem was built: “we have [in 2019] 112% mobile phone subscriptions and 66% internet access” [2]. Whereas the latter figure is on par with the UK the former is far behind with a mobile internet user penetration of 88.71% the same year [11].

Our recommendation is to reduce the digital divide and keep increasing the mobile internet user penetration rate in rural areas. In 2019, 90% of the total fixed broadband connections in Albania were in urban areas, whereas 10% were in rural areas [12].

We also need to look at the potential of digital payments to reduce the dependence of the economy on cash, used for 90% of small payments, and its corollary, fiscal evasion

that hampers the Albanian GDP by approximately 1.5% every year [2].

Another blockchain use case is foreign remittances [13] [14], defined as “the transfer of monetary or in-kind “income and wealth” from workers in one country to their country of origin” [15]. As Ahmetaj explains, “around 1.2 million Albanians are emigrants, or 40% of those living in Albania, and the remittance flows are estimated at around USD 1.15 billion per year, or 12% of the GDP” [2]. **A central pillar of the national blockchain roadmap for Albania thus ought to encompass the digitisation of foreign remittances.**

It is well known that in the global fiat payments system, cross-border settlement, and payment services are accommodated by correspondent banks that impose monetary and time-related costs. FinTech innovations in general, and DLT in particular, have a significant cost-reducing potential. However, one impediment to mass scale adoption in cross-border payments remains the insufficient scalability of existing blockchain technology not yet mature enough to handle the tens of millions of payments required on a daily basis [16]. Another major challenge for the Albanian Blockchain Roadmap is to **capitalise on the recent innovations such as Ethereum 2.0 and similar technologies** [17].

The Albanian DLT ecosystem is in its infancy. However, the country is presently attracting substantial blockchain cross border investment. For instance, Tenset has set out to revolutionise cryptopayment investments by offering investment exposure to a wide range of assets by holding the Tenset token in an ETF 2.0 portfolio. Tenset operates as a legal and officially registered entity in the United Arab Emirates¹; but it opened its Albanian offices in March 2021². (<https://www.tenset.io/en>). Our final recommendation is for local authorities to **explore the conditions of enhanced attractiveness for inward foreign direct blockchain investment in Albania.**

The consolidation of the rule of Law in Albania is a key requirement in the context of its candidacy for accession to the European Union. [18]. E-Voting on the blockchain is now a well understood use case in blockchain research, thanks to pioneering works published in JBBA [19]. In this respect, Chris Holmes, Member of The House of Lords in the UK, shows how blockchain-powered e-voting solutions could help support democracy [20]. Given the massive issue of trust in politics in general, and of integrity in countries plagued by corruption phenomena, a reflection to which Albania is alas not alien to [21], we recommend **research on e-voting and e-elections to be at the forefront of the Albanian blockchain roadmap.**

Going beyond the existing triple-helix model (Government, Business Academia) adopted by Albania [22], we recommend

¹ <https://www.tenset.io/en/tenset-legal-information>.

² <https://opencorporates.al/en/npt/m11518011u>.

an incremental progression with a blockchain roadmap based on quadruple-helix innovation systems (policymakers, academia, industry, and public services / infrastructures) [23].

These transformations ought to be accompanied by **opening up Albania to “extended knowledge Networks’ (such as the Centre for Evidence-Based Blockchain) that will advance holistic, multi-disciplinary benchmarks in blockchain” [24].**

Concluding remarks

Albania is a fast-growing economy located in South-East Europe currently lacking a national DLT roadmap mirroring the pioneering UK National Blockchain Roadmap (NBR) [24]. Our approach in this research note was to begin by examining the state of the existing cryptocurrency regulatory framework. Based on some recent and wide-ranging legal and socio-economic evolutions, we have then issued a set of recommendations. The latter include increasing the number of licensed entities, reducing the digital divide by increasing the mobile internet user penetration rate in rural areas. They also require the digitisation of foreign remittances and capitalising on blockchain scalability breakthroughs. Further, the attractiveness of inward Foreign Direct Investment needs to be enhanced. A full-fledged research agenda on DLT shall holistically investigate the booming Albanian start-up ecosystem [25] including the role of business angels [26] whereby a more specific focus on DLT projects shall be adopted. The rule of law in Albania would be strengthened by the implementation of new blockchain e-voting solutions, thereby helping generate progress in the country’s bid to access the EU. Finally, the blockchain roadmap should see the realisation of incremental progress from the triple-helix to the quadruple-helix system.

Further research and efforts will also be needed to construct adequate metrics and design new research methodologies to measure the current progress of the national roadmap.

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Marc Pilkington and his team at Epoka University designed and coordinated this research and prepared the manuscript in entirety.

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References:

- [1] Institute of Statistics INSTAT, “Popullsia e Shqipërisë”, 2020. Accessed on: July 14, 2022. [Online]. https://web.archive.org/web/20200730205919/https://www.instat.gov.al/media/6849/popullsia_me-1_janar_2020.pdf
- [2] K. Ahmetaj, “Second Deputy Governor Ahmetaj: Address to the conference on “Balancing Fintech Opportunities and Risks: Implementing the Bali Fintech Agenda”, Vienna, Austria”, Press Release, Bank of Albania, January 29, 2019. Accessed on: July 14, 2022. [Online]. https://www.bankofalbania.org/Press/Second_Deputy_Governor_Ahmetaj_Address_to_the_conference_on_Balancing_Fintech_Opportunities_and_Risks_Implementing_the_Bali_Fintech_Agenda_Vienna_Austria_22962_1.html
- [3] World Bank Group and Bank of Albania, “The Retail Payment Costs and Savings in Albania”, 2018. Accessed on: July 14, 2022. [Online]. <https://doi.org/10.1596/30060>
- [4] L. Bregu, “Albania - Chasing the Financially Excluded”, Currency Research Malta, Ltd., August, 2020. Accessed on: July 14, 2022. [Online]. https://www.bankofalbania.org/rc/doc/CBPN_Aug2020_V3_8_17505.pdf
- [5] E. Martiri, E. and G. Muça, “An analysis of the blockchain ecosystem in the Western Balkans countries”, October 2018.
- [6] E. Baçe, “Cryptocurrencies: Regulation under the Albanian legal framework, Doing Business International”, 13 July 2021. Accessed on: July 14, 2022. [Online]. <https://www.doing-business-international.com/2021/07/cryptocurrencies-a-study-in-them-and-regulation-of-the-albanian-legal-framework/>
- [7] L. Tassev, ‘Albania to Start Taxing Crypto-Related Income From 2023’, Bitcoin.com, June 25 2022. Accessed on: July 14, 2022. [Online]. <https://news.bitcoin.com/albania-to-start-taxing-crypto-related-income-from-2023/>
<https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=GB>
- [8] A. Shvartsman, “How to Buy Bitcoin in Albania”, Bitrawr, 2 July 2022. Accessed on: July 14, 2022. [Online]. <https://www.bitrawr.com/albania>
- [9] Council of Europe, “Improvements in fighting money laundering and terrorist financing in Albania led to upgraded ratings MONEYVAL report states”, Council of Europe, 8 June 2022. Accessed on: July 14, 2022. [Online]. https://www.coe.int/en/web/moneyval/home/newsroom/-/asset_publisher/zTE3FjHi4YJ7/content/improvements-in-fighting-money-laundering-and-terrorist-financing-in-albania-led-to-upgraded-ratings-moneyval-report-states?inheritRedirect=false&redirect=https%3A%2F%2F
- [10] A. Taylor, “Albania to tax income from cryptocurrency trading by 2023”, Euractiv, June 24 2022. Accessed on: July 14, 2022. [Online]. https://www.euractiv.com/section/politics/short_news/albania-to-tax-income-from-cryptocurrency-trading-by-2023/

- [11] World Bank Group, "Mobile cellular subscriptions (per 100 people)" - United Kingdom. Accessed on: July 14, 2022. [Online]. <https://data.worldbank.org/indicator/IT.CEL.SETS.P2?locations=GB>
- [12] Ministry of Infrastructure and Energy of Albania, "National plan for sustainable development of digital infrastructure, broadband 2020-2025", Approved by DCM no 434, p.12, 2020. Accessed on: July 14, 2022. [Online]. <https://www.infrastruktura.gov.al/wp-content/uploads/2020/07/National-Plan-BBAnd-EN.pdf>
- [13] M Pilkington, "Blockchain technology: Principles and applications", Research handbook on digital transformations, Edward Elgar Publishing, p.245, 2016.
- [14] World Bank. "Remittances: A Gateway to Sustainable Development: Lessons Learned from the Implementation of Project Greenback in Albania", Washington, DC, 2021.
- [15] A. Frashëri, V. Semi, R. Lilaj, E. Çela, L. Vrioni, and A. Koleniço., "Remittances: A support for development", Bank of Albania, 16 June 2018. Accessed on: July 14, 2022. [Online]. https://www.bankofalbania.org/rc/doc/Remitancat_Revista_eng_12103.pdf
- [16] P. Hugli, and J. Gantenbein, "Blockchain technology reinvents correspondent banking - just not yet", Bank Frick, October 20, 2021, Accessed on: July 14, 2022. [Online]. <https://www.bankfrick.li/en/news-and-insights/blockchain-technology-reinvents-correspondent-banking-just-not-yet>
- [17] Codementor. Blockchain Scalability: Challenges and Recent Developments, 21 June, 2022, Accessed on: July 14, 2022. [Online]. <https://www.codementor.io/blog/blockchain-scalability-5rs5ra8eej>
- [18] European Commission. "Albania", Accessed on: July 14, 2022. [Online]. https://ec.europa.eu/neighbourhood-enlargement/enlargement-policy/albania_en (consulted on 14/07/2022)
- [19] K. Curran, "E-Voting on the Blockchain. The Journal of the British Blockchain Association", 1(2), 4451. 2018. Accessed on: July 14, 2022. [Online]. <https://jbba.scholasticahq.com/article/4451.xml>
- [20] Holmes, C., 'How Blockchain Technology could support Democracy and E-Voting', The Journal of The British Blockchain Association, 33960, 2022. July 14, 2022. [Online]. <https://jbba.scholasticahq.com/article/33960-how-blockchain-technology-could-support-democracy-and-e-voting>
- [21] 'Round table discussion on 'Integrity and trust in elections in Albania: Time for a breakthrough in political finance transparency', Tirana, Albania, 22 June 2022, Accessed on: July 14, 2022. [Online]. <https://www.idea.int/news-media/events/integrity-and-trust-elections-albania-time-breakthrough-political-finance>
- [22] Albanian Investment Development Agency. Triple Helix, Accessed on: July 14, 2022. [Online]. https://aida.gov.al/en/sme/explore/triple-helix_
- [23] R.J. Steenkamp. The quadruple helix model of innovation for Industry 4.0. Acta Commercii, 19(1), 1-10. 2019 Accessed on: July 14, 2022. [Online]. <https://dx.doi.org/10.4102/ac.v19i1.820>
- [24] British Blockchain Association. An excellence standards framework for UK's national blockchain roadmap, p.6. 2021. Accessed on: July 14, 2022. [Online]. <https://britishblockchainassociation.org/wpcontent/uploads/2021/07/UK-NBR-Excellence-Standards-Framework.pdf>
- [25] K. Hach and E. Trenkmann, Entrepreneurial & Innovation Ecosystem in Albania, Twelve Findings on the Albanian Startup Ecosystem. 2019.
- [26] E. Ceko, "Some thoughts on Business Angels in Albania". Wisdom University College, p.122, May 9-10, 2019.