Temporary Protection Mechanism launched by the EU in March to help the Ukrainian refugees fleeing the war. Thirdly, Lonardo analyzes the EU's financial assistance for the transfer of weapons to Ukraine. Regarding this issue, he underlines that for the first time in its history, the EU has decided to finance the provision of military equipment designed to deliver lethal force. As a conclusion to this chapter, Lonardo is of the opinion that the EU's response shows political cohesion, but it is not revolutionary in practice. These arguments of the author support the widespread view that the EU is an economic giant, political dwarf, and military worm.

The most interesting aspect of the book is that it was published a short time after the start of the war in February 2022. This is a normal case considering that the last two chapters of the book, almost half of it, consist of two articles previously published by the author. It is also noteworthy that the author made use of English, French, Italian, and Russian sources for his book. On the other hand, although the European Council granted Ukraine the status of a candidate for accession to the EU in June, the lack of a wide-ranging analysis on Ukraine's EU membership process is the most obvious shortcoming of the book. Despite this shortcoming, the book provides a good contribution to the literature on the EU's reactions to the war. In any case, I recommend this short book as a good starting piece primarily for analysts, post-graduate students, and journalists who would like to understand the past of EU-Ukraine relations and the EU's reactions to the war.

The Rise of Blockchains:

Disrupting Economies and Transforming Societies

By Nir Kshetri

Northampton: Edward Elgar Publishing, 2022, 216 pages, \$120.00, ISBN: 9781802208160

Reviewed by Bilal Bağış, Sabancı University and Bingöl University

Blockchain is a newly emerging technology that has already drastically changed many aspects of our life and the way businesses and national economies function. It could be used in smart contracts in the shipping industry, in digitalizing the supply chains, payments, and in financing trade amongst others.

Blockchain most basically helps deal with the trust issue and decreases the cost of verification procedures. It increases efficiency in business processes and supply chains, helps with the digitalization processes and smart con-



tracts, and also helps overcome reputational or trust-wise issues. This new mechanism of proving trustworthiness is particularly important for SMEs and individuals that don't yet have a built-up reputation.

Blockchain helps create new networks, organizations, and models;

functions as an intermediary instrument or authority of verification and replaces the conventional trust instrument in any formal business relationship. Blockchain could even be an alternative tool or mean of governance, legal identity, and could potentially replace public verification or approval mechanisms. Its decentralized nature, however, most basically means the validation process is not through a central authority, but rather via a consensus algorithm in a distributed network.

It is, meanwhile, a database or digital ledger created by a network of devices. They are secure by design and because there is no central data storage, hacking would not be able to delete all data or information regarding the transactions. It is thus a secure and decentralized network that verifies transactions. The network keeps digital records of transactions on multiple devices simultaneously.

As a new distributed ledger technology, blockchain is transforming economies, politics, and even whole societies. Blockchain technology and the ecosystem around it, including the much-related internet of things, artificial intelligence, NFTs, metaverse, Web 3.0, and cryptocurrencies are all altering the payment, supply chain, and even the cybersecurity and privacy systems. Although it came along with the cryptocurrency revolution, NFTs and metaverse are probably the most trendy applications of blockchain technology. Metaverse is expected to further propagate the NFT market.

Kshetri's *The Rise of Blockchains* is a timely, to-the-point, and detailed book on a relatively new and still obscure topic of blockchain technology. The book focuses on this all-new phenomenon deeply impacting, sometimes disrupting, and transforming our societies, policy-making, and the global economy today. And as a matter of fact, it also does a good job focusing on this new technology that has both introduced cryptocurrencies and transformed the supply chain, payments, privacy, and security systems.

The book introduces blockchain technology as the next big thing of the 21st century, after the internet revolution of the 2000s and among the biggest innovations with great potential to transform the world. Blockchain is introduced as the next big innovation following steam engines, electric power, information technology, and artificial Intelligence. It also critically analyzes various topics within blockchain technology, in detail.

It provides extensive data and market insights into this new industry. From early-stage companies and start-ups to venture capitalists, market dynamics and transformations are demonstrated clearly. The book discusses successful applications of block-chain technology in supply chain management, business strategies, and in dealing with trust-related challenges; as well as its use in security, privacy, payment, and settlement systems in detail.

The author uses, among others, international trade, finance, creative content, and food industries to analyze and demonstrate various forms of disruptions due to blockchain-led transformation. It looks at the organizational and business-to-business implications of the new blockchain-led business models to improve trust, efficiency, supply chain management, and security.

The book touches on both the positive and negative effects of the blockchain revolution. The author suggests new major strategies to incorporate into blockchain to improve network relations. It further discusses how blockchain could and (indeed) should be used in combination with other advanced and emerging technologies, including AI and the IoT. Compliance issues with domestic and international laws and regulations are also analyzed thoroughly.

BOOK REVIEWS

The book provides comprehensive block-chain-related data from various sources, in particular in a relatively new area where it is rather difficult to access data and empirical evidence. Chapter summaries and conclusions make it easier and more efficient to revisit the arguments and critically analyze the conclusions. Focus boxes and practical case studies provided in the text enable users to recall and refresh the theoretical and technical discussion in the respective sections.

As rightly emphasized in the book, for example, it would be impossible to delete the data or information regarding any transaction in a blockchain. It thus increases transparency. Transparency also means traceability and trust in products or services. The book also underlines first-party and second-party trust issues (in addition to the third-party trust issues that are already addressed by blockchain technology). It discusses how the combination of blockchain with other technologies (such as AI) would help overcome these types of other dimensions of trust-related concerns, and how it would increase productivity and efficiency.

However, as the number of users increases, blockchain systems may also get inefficient and confusing. It is also still not clear how too much automation and a combination of blockchain, AI, and IoT, and the resulting smart contracts would be beneficial even in

the long term. Too much automation, robotization, and other side effects could be challenging. The book also underlines block-chain-wise weak transformation in the government sector, for which it might be better to opt for the public sector term, as the block-chain technology itself is a means to replace the authentication or validation mechanisms of the governments.

Moreover, blockchain is still a relatively new technology and has its own weaknesses. DeFi, or decentralized finance, is one such area where there are numerous hacking attacks against digital currencies or cryptocurrencies. Cryptocurrency wallets especially hot wallets are often associated with cybersecurity risks. Ethereum contracts and DAOs are also frequently hacked. However, blockchain can still be used to improve security and privacy in finance, IoT devices, and even in healthcare. It will work much better than conventional password-based security systems. At a minimum, people won't have to send over and record their personal data at some central repository. Data won't be sent over to anyone or anywhere, just access permission will be granted whenever needed. It also provides anonymity, without revealing the true identity of a user. The book is highly recommended for experts, scholars, and researchers interested in digitalization in finance and blockchain technologies in general.