Journal of Balkan Economies and Management

VOLUME 2 | ISSUE 2 | JULY 2026

IDEFE PUBLICATIONS

Journal of Balkan Economies and Management

Volume 2, Issue 2 - 2026
ISSN: 2955-2567
e-ISSN: 2955-2575

Journal of Balkan Economies and Management is an international, academic and peer-reviewed refereed journal. It is published twice a year.

Concession Holder on Behalf of Balkan Studies Foundation
Assist. Prof. Dr. Sevba Abdula, Istanbul Medeniyet University

Graphic Design
Faruk Özcan

Publication Type
International Periodic

Publication Period
Published twice a year, May and November

Print Date
July, 2026

Printed by
Ajgraph- Skopje Citadel, 1000

Correspondence
Journal of Balkan Economies and Management
Makedonsko-Kosovska Brigada No: 32 1A, Skopje 1000 North Macedonia
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Research Articles

The Allocation of Capital in the Early Republic: The Credit and Participation Policies of Türkiye İş Bankası, 1924-1933

Muhammet Ali Yapıcı & Gülden Ülgen

Abstract: This article analyzes the mechanisms of capital allocation in the early Republican period through an examination of the credit and participation policies of Türkiye İş Bankası between 1924 and 1933. Its central argument is that, during this period, İş Bankası functioned not merely as a commercial bank that collected deposits and extended loans, but as an active institutional actor that shaped the direction of private capital. The study interprets early Republican economic policy not as a sharp rupture between the liberalism of the 1920s and the statism of the 1930s, but within the continuity of the

Yapıcı, M. A., & Ülgen, G. (2026). The Allocation of Capital in the Early Republic: The Credit and Participation Policies of Türkiye İş Bankası, 1924–1933. *Journal of Balkan Economies and Management*, 2(2), 9–34.

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Balkan Studies Foundation
DOI: https://doi.org /10.51331/bemA14
Journal of Balkan Economies and Management, 2 (2), 2026
journalbem.com

Received:26.04.2026
Accepted:13.06.2026

idea of the national economy (*milli iktisat*). In this sense, the bank is treated as one of the institutional instruments through which the national-economy tradition inherited from the Second Constitutional Period was reformulated under Republican conditions. By reading the annual reports and balance sheets for 1924-1933 both quantitatively and qualitatively, the article draws an analytical distinction between credit policy and participation policy. Accordingly, while credit policy served a broader financing function directed especially toward commercial circulation, participation policy reflected the bank's preference for committing capital directly to fields it regarded as more selective, long-term, and strategic. The article further argues that the Great Depression of 1929 and the subsequent shift toward statism did not constitute a rupture that rendered İş Bankası obsolete; rather, they redefined its function in line with new objectives of industrialization and capital direction. Consequently, Türkiye İş Bankası is evaluated as a hybrid institution of capital allocation, situated in the permeable space between the state and private enterprise, and as an actor that influenced the sectoral and institutional distribution of capital in accordance with the principles of the national economy.

Keywords: National Economy (milli iktisat), Türkiye İş Bankası, Capital Allocation, Early Republican Period, Statism, Participation, Credit Policy

Introduction

Among the foremost economic problems facing the newly founded Republic of Türkiye was the question of how to mobilize the limited capital that remained after the wars and the liquidation of the capitulation regime. This was not merely a matter of insufficient accumulation; it was also an allocation problem, concerning which sectors, which actors, and which political-economic priorities the existing capital would be directed toward. This article aims to analyze the mechanisms of capital allocation in the early Republican period by following the credit and participation policies of Türkiye İş Bankası between 1924 and 1933. The conventional historiography of early Republican economic policy tends to draw a sharp line separating the so-called liberal years of the 1920s from the statism of the 1930s. Setting aside this framework of opposition, the present study proposes to read the period as the institutionalization, under Republican conditions, of the national-economy idea inherited from the Second Constitutional Period. Within this reading, the 1924-1933 interval becomes visible not as two disconnected policy segments but as a single process in which the same national-economy line renewed its instruments in response to changing economic conjunctures.

In order to trace this continuity through a concrete institutional case, Türkiye İş Bankası is a particularly suitable vantage point. Founded on 26 August 1924, the bank was one of the instruments through which the national-economy discourse's ideal of "creating domestic capital" was institutionalized by the cadres of the Republic. On the one hand, the bank performed the classical function of a commercial bank, collecting deposits and extending loans; on the other, it became directly involved in production relations by establishing participations or taking shares in existing companies across a wide range of fields extending from insurance to mining, from textile manufacturing to sugar, and from glass production to construction materials.

The study's basic approach is that, during this period, the bank functioned not as a passive intermediary that simply collected deposits and extended loans, but as an active institutional actor that shaped the direction of private capital through its credit-allocation decisions and participation choices. To ground this argument, the study draws an analytical distinction between credit policy and participation policy. Credit policy assumed a financing function directed toward broader economic circles, and especially toward commercial circulation; in this respect, the bank served as a supplier of liquidity that fed the everyday fluidity of the market. Participation policy, by contrast, rested on a different logic: the bank preferred to commit capital directly to fields it regarded as more selective, long-term, and strategic, making itself a direct party to production relations rather than merely intermediating capital flows. Following the two policy lines separately yields an analytical gain, making it possible to see together both the horizontal axis of capital allocation (its distribution across sectors) and its vertical axis (the choice between short and long maturities). The rupture produced by the Great Depression of 1929 also takes on a new form within this framework. The conventional narrative depicts the Depression as a break in which statism liquidated liberal policies and narrowed the field of private-public hybrid institutions such as İş Bankası. The study argues the opposite: the statist orientation that became pronounced after the Depression was not a rupture that eliminated the bank's function, but a transformation that redefined it in line with new objectives of industrialization and capital direction.

The adoption of the First Five-Year Industrial Plan in 1933 and the establishment of Sümerbank redrew the bank's field of action, but they did not end its role as an institutional instrument of the national-economy line. For this reason, 1933 is conceptualized in this study not as an "end" but as a threshold of transition.

The study's principal source is the annual activity reports published by İş Bankası between 1924 and 1933, together with their accompanying balance sheets. These documents are read both quantitatively and qualitatively. The quantitative reading follows the evolution of deposit and credit magnitudes over the years, the sectoral distribution of loans, and the institutional expansion of the participation portfolio. The qualitative reading incorporates into the analysis the board of directors' assessments of the period, the noteworthy orientations in credit policy, the explanations regarding the situation of the companies in which the bank held stakes, and the reports' reading of the general economic conjuncture. Reading these two planes together makes it possible to see the activity reports not merely as financial documents but also as instruments of the bank's strategies for justifying its own practice and presenting it to the public.

This source base, however, carries an inherent limitation that must be made explicit. The board reports were not neutral records but documents of institutional self-presentation, drafted to justify the bank's conduct before its shareholders and the wider public; as such, they tend toward an apologetic register and exhibit a selective silence on politically sensitive or unsuccessful undertakings. Reading them only at face value would risk reproducing the bank's own self-justification as analysis. The present study guards against this in two ways. First, it treats the qualitative claims of the reports not as testimony to be accepted but as discourse to be interpreted, attending as much to what the reports emphasize as to what they pass over in silence. Second, wherever possible, the quantitative series are corroborated against external and independent sources rather than taken solely from the bank's own publications: the balance-sheet figures and ratios are cross-checked against the reconstructions of Kocabaşoğlu et al. (2001), the contemporary assessments of Tahsin and Saka (1930) and of the expert commission led by Hines et al. (1936), the comparative banking data assembled by Tezel (2015), and the cross-institutional figures reported by Silier (1975). Where the bank's own accounts and these external readings diverge or where the former fall silent, the discrepancy is itself treated as analytically significant rather than smoothed over.

Within this entire framework, Türkiye İş Bankası is evaluated as a hybrid allocation institution, one situated in a permeable space that transcended the sharp boundaries between the state and private enterprise, and one that influenced the sectoral and institutional distribution of capital in accordance with the national economy. The bank's hybrid character stems not only from the fact that its legal status combined private and public elements, but also from the fact that its economic function integrated two distinct logics, classical banking and direct capital investment, under a single institutional roof. The study builds this argument across four sections. The first section discusses the conceptual and institutional continuity of the national-economy line extending from the Second Constitutional Period to the Republic, and situates the founding context of İş Bankası within this continuity. The second section examines the bank's credit policy between 1924 and 1933 in light of the activity reports, attending to the distinction between commercial, industrial, and agricultural financing. The third section is devoted to the participation policy of the same period, analyzing the course and strategic rationales of the partnerships in fields such as insurance, industry, and mining. The fourth section addresses how the statist orientation that became pronounced after the 1929 Depression redefined the bank's credit and participation strategies; it grounds the argument that this transformation was not a rupture from the national-economy line but an adaptation of it to new conditions. The conclusion assesses the extent to which this reading of the activity reports lends content to the concept of the hybrid allocation institution, and in what direction it corrects the established assumptions regarding the early Republican capital order.

The Economic Landscape of the Early Republic and the Founding of İş Bankası

When the Republic was proclaimed in 1923, a period of wars that had lasted more than a decade had come to an end. Yet the economic devastation caused by the wars, occupations, and demographic crisis was evident. Despite this, it is clear that the general outlook of the economy improved rapidly between 1923 and 1926. Although per-capita GDP estimates do not allow for precise measurement for the period under study, the available figures can be consulted to gain a sense of the general picture. In 1926 prices, per-capita income stood at 119 Turkish liras. In terms of the value of the Ottoman gold lira at that date, this figure corresponds to 15 Ottoman liras. The per-capita income calculated by Eldem for 1913 was 11 Ottoman liras. On this rough calculation, then, it may be said that, in terms of per-capita income, the destruction wrought by the First World War had been recovered by 1926. The Turkish economy grew at an average rate of 5.6 percent between 1926 and 1939. To offer an assessment of the general economic picture in this period, it may be said that economic growth was rapid in recovering from the destruction of the war. This economic growth, however, did not bring about a structural change. Although a certain degree of industrialization was observed in this period, agriculture would remain the dominant sector of the Turkish economy for some time to come (Tezel, 2015, pp. 132-134).

The monetary policy of the early Republican period, for its part, was conservative and cautious. Despite the growth in production volume, the Republican authority kept the volume of money almost constant over the 1923-1938 period. The paper-money volume of approximately 158 million liras inherited from the Ottoman State was kept constant even after the issuance of the Republic's banknotes in 1928. One of the principal reasons for this was that Ankara was deprived, until the 1930s, of a national bank that could manage monetary policy. A second factor was the knowledge that, in the periods when the Ottoman State had issued paper money, the value of that money had eroded rapidly as its quantity increased. The last Ottoman banknotes, which bear the distinction of being the first money of the Republic, had likewise suffered a serious loss of value owing to the continually increasing volume of emission during the war years and the well-known atmosphere of turmoil (Yapıcı, 2025). This being so, the Republican administration pursued a tight monetary policy at least until the years of the Second World War. The reason for this tightness, despite the economy's growing production volume, may have been partly a deficiency of economic knowledge. Indeed, according to economic theory, it is known that an increase in emission at the rate of growth will not generate inflation. Keeping the money supply constant in order to preserve the value of money, while the volume of exchange nonetheless grew, gave rise to financial institutions that would meet the liquidity needs of the markets. The 1920s were a period of considerable expansion in the Turkish banking sector. In this period, when central supervision was limited, the increase in the volume of money in circulation was 12 million liras, whereas deposits in banks rose by 135 million liras to reach 211 million liras (Tezel, 2015, p. 145).

Since it was difficult to meet the rising demand for capital with the existing banks, the number of banks also increased in this period. The number of national banks, which was 19 in 1924, rose to 44 by 1930. At the same time, the banks increased their deposit and creditor accounts roughly ninefold. Total borrowings, for their part, increased 4.5-fold (Tekeli and İlkin, 1997, pp. 193-194). All of this indicates the rise in demand for the factor of capital in the early Republican period.

One of the most important overarching items on the agenda of the newly founded Republican administration was the concept of nationalization. In the process of transition from empire to nation-state, there was a desire to reduce foreign control in the various sectors of the economy. Indeed, the very content of the concept of "foreign" had by then undergone a transformation. Whereas Ottoman subjecthood had encompassed a wide variety of religious and ethnic groups, the Republic of Türkiye presented a more homogeneous demographic structure. Capital, one of the most important factors of the economy, was likewise to be nationalized in this period. The weight of foreigners in the banking sector (in terms of the share of deposit ownership) fell from 78 percent in 1924 to around 14 percent in the 1950s. This transformation in the banking sector, the most important sphere of foreign-capital control in the Ottoman period, was perhaps the most important political-economic change of the early Republican period (Tezel, 2015, pp. 148-149).

The most important and emblematic institution of this transformation was, without doubt, Türkiye İş Bankası. İş Bankası was founded in Ankara about ten months after the proclamation of the Republic. The bank's first capital provider was Mustafa Kemal himself. During the years of the national struggle, part of the aid worth 500,000-600,000 liras that had come from the Muslims of India had been placed at the disposal of the Western Front Command before the Great Offensive. After the proclamation of the Republic, the unspent portion of this money was transferred back to Atatürk's personal account at the Ottoman Bank. The question of how to use this money was being considered by Uşşakizade Muammer Bey, who was at the time Atatürk's father-in-law and also one of the leading merchants of Izmir. Muammer Bey, who initially wished to put the money to use by establishing an import-export company, was sent by Atatürk to Celal Bayar. As a result of the consultation with Bayar, it was decided that it would be more fitting to use the money to establish a national bank. Following these deliberations, at meetings held in Çankaya, the name "İş Bankası" (Banque d'Affaires de Turquie) was proposed by Hasan Saka, who was at the time Minister of Trade. Again, at one of the Çankaya meetings, while Celal Bayar was appointed director-general by the Gazi, the task of preparing the founding statute was entrusted to Hasan Saka, the man who had given the bank its name (Kocabaşoğlu et al., 2001, pp. 1-15).

İş Bankası was the largest financial establishment of the early Republican period to be founded with private capital. Its founding statute was approved by the Council of Ministers on 20 August 1924, and the bank was definitively established on 26 August 1924. The purpose for which İş Bankası was founded was set out in Article 2 of its principal statute as follows: to carry out general banking transactions; to undertake all kinds of agricultural, industrial, and mining enterprises and public-works projects; to produce and manufacture all kinds of materials and to engage in contracting work; to form companies in order to conduct the activities enumerated above; and to carry out and conduct various industrial and commercial transactions, whether on its own account or jointly with domestic and foreign institutions, or in the name and on the account of such institutions. In addition, these articles did not limit the bank's activities. According to the statute, the bank was authorized to enter into any business it deemed necessary. Article 5 of the 1924 statute of Türkiye İş Bankası bound the institution's initial financial skeleton within a legal framework. Under the relevant article, the bank's nominal capital was structured as a total of 1,000,000 Turkish liras over 100,000 shares with a unit value of 10 Turkish liras. As required by legal procedure, the one-quarter cash capital share demanded of the partners (250,000 Turkish liras) was paid at the moment of founding directly from the personal funds of Mustafa Kemal Atatürk. The distribution of these issued shares to the national market, for its part, displayed a regional differentiation. While the shares readily found buyers in the Ankara financial market, where the bank's economic mission was felt most closely, the registration and sale transactions of the shares issued in provincial and coastal commercial centers such as İstanbul, İzmir, Samsun, and Bursa proceeded at a more cautious and slower pace (Özer, 2010, pp. 153–154).

The economic-history literature characterizes the 1920s as the liberal period and the 1930s as the period of statism that emerged after the 1929 Depression. Yet, as is concretely seen in the example of the founding of İş Bankası, the state intervened in the economy to the extent of its capacity. Çankaya, which had been involved in the founding of the bank, also became involved in the credit and participation moves to be made in the subsequent period. This interventionist attitude was guided primarily by the priority of nationalizing the economic factors. This understanding was inherited by the Republican administration from the "national economy" policies that had emerged after the Second Constitutional Period. National-economy policies, which had initially advanced through merchants, also turned toward the banking sector with the outbreak of the First World War. Indeed, the government, unable to obtain support on the matter of financing the war from the Ottoman Bank, which was foreign-capitalized but held the privilege of being the national bank, undertook an initiative to establish a bank whose capital was also national. The İtibar-ı Millî Bankası, founded in 1917, was envisioned as a replacement for the Ottoman Bank, whose privilege was due to expire in 1925. Founded during the war with a capital of 4 million liras, the bank had rapidly opened branches with the support of the government. Cavit Bey, the Minister of Finance of the Committee of Union and Progress, was the chairman of the bank's board of directors. From its very founding, the bank was promoted as the national bank of the future (Toprak, 1995, pp. 62-65). The same continuity is observable in foreign-capitalized joint-stock banks that bridged the imperial–Republican divide, such as the Turkey/Turkish Trade and Industry Bank (TTIB/TUTIB), whose late Ottoman institutional templates persisted well beyond 1923 (Serdaroğlu, 2025).

This continuity was not confined to nationally capitalized institutions such as the İtibar-ı Millî Bankası or İş Bankası. As Serdaroğlu (2025) demonstrates, foreign-capitalized joint-stock banks registered under domestic law could embody the same hybrid logic, combining international, predominantly French, capital with the legitimizing discourse of the national economy. The Turkey Trade and Industry Bank (1910-1914) and its Republican-era successor, the Turkish Trade and Industry Bank (1924-1937), illustrate how late Ottoman institutional templates were adapted rather than dismantled under Republican legal and economic frameworks, persisting through a prolonged liquidation well into the late 1930s. Read alongside these cases, İş Bankası appears not as an isolated experiment but as the nationally capitalized variant of a broader institutional family in which state endorsement, transnational or private capital, and national-economy discourse were fused within a single organizational form. The hybridity that this study attributes to İş Bankası thus characterizes the wider Ottoman-Republican financial continuum, spanning both domestically and foreign-financed ventures.

The application of national-economy policies continued during the Republican period. Türkiye İş Bankası, too, was founded as a commercial bank and as part of the drive to nationalize capital. In this period, great incentives and privileges were granted to private enterprise. Within the scope of nationalizing capital accumulation, İş Bankası was accorded a broad sphere of initiative. Indeed, no legal regulations were even introduced for the bank's activities by means of a banking law; banks were made subject to the existing commercial code (Kocabaşoğlu et al., 2001, p. 18).

The Factor of Capital in the Early Republican Period: An Assessment through the Credit and Participation Policies of İş Bankası

The economic activities of Türkiye İş Bankası during the 1924-1933 period rested on two complementary policy axes: lending and participation investment. Although these two instruments appear as separate items on the balance sheet, they are not functionally independent of one another. Together, it may be said, they were used to form the basic financial infrastructure of the Turkish-Muslim commercial and industrial bourgeoisie that the state sought to build during the first decade of the Republic.

The bank's own definition of its founding purpose clearly reveals this intention: beyond the important assistance it provided by extending credit to private entrepreneurs in the field of national development, the bank aimed to render great assets to the country through the institutions it created by means of direct establishment and participation (Türkiye İş Bankası, 1925). This expression contains clues not to a purely commercial conception of banking, but to an explicit political preference oriented toward the formation of a particular class.

The bank's participation in its first year of activity was political rather than economic. That Türkiye İş Bankası carried out its first participation with the Karagöz newspaper, then under the management of Burhan Cahit (Morkaya) Bey, was not an accidental choice in terms of the conjuncture of the period. This well-established satirical publication, which had continued its publishing life since 1908, addressed a wide audience and surpassed many of the period's daily newspapers in circulation. It is known that Karagöz, published under the management of Burhan Cahit Bey from 1918 onward, established an organic bond with the Republican People's Party in the period following the proclamation of the Republic.

İş Bankası's financial initiative toward this publication took shape in accordance with a verbal order from the party. As a result of this directive, 60 of the existing 100 shares of the newspaper, which was structured as a limited partnership, were taken over by İş Bankası on behalf of the party. In 1926, Burhan Cahit Bey also brought out another newspaper, named Milliyet, in Istanbul. In 1928, after the adoption of the Latin alphabet had reduced its sales figures and left it in financial straits, İş Bankası became a partner in the newspaper by purchasing 20 percent of its shares. İş Bankası also maintained good relations with media organs other than these two publications (Kocabaşoğlu et al., 2001, p. 150).

It is worth pausing to consider how these media stakes relate to the framework of capital allocation that this study theorizes, since, at first sight, they appear to be instances of pure political instrumentality rather than of economic placement. The Karagöz and Milliyet participations were indeed political in motivation, undertaken on the party's instruction and yielding little or no commercial return; to treat them as ordinary profit-seeking investments would misread them. Yet they are not thereby external to the allocative logic the article describes. The argument of this study is precisely that İş Bankası functioned as an institution that directed capital according to criteria other than market return, and the deployment of resources toward outlets aligned with the governing party is best understood as the limiting case of that same logic rather than as a separate category. Where the insurance, port, and mining participations allocated capital to nationalize foreign-dominated sectors or to build productive capacity that did not yet exist, the media participations allocated it to consolidate the political-ideological conditions under which the national-economy program operated. All three are facets of a single conception in which the bank's placements served a constructive, state-directed purpose; the media stakes simply make visible, in their starkest form, that the allocative criterion was never confined to commercial profitability. Read this way, they strengthen rather than complicate the central claim, since they show how far the bank's departure from market logic could extend.

In 1925, the first full year of activity following the founding of Türkiye İş Bankası, its credit and capital participations exhibited full accord with the "national economy" paradigm of the early Republican period. As of 1925, the bank did not remain merely a conventional credit institution; it assumed the role of a direct entrepreneur and founding actor in strategic sectors. In this context, the establishment in 1925 of the Anadolu Joint-Stock Turkish Insurance Company with a capital of 500,000 TL, and the bank's becoming a founding partner in the Turkish joint-stock companies that held the monopoly over the Istanbul and Izmir port operations, were concrete manifestations of the macroeconomic will to nationalize the finance and logistics sectors. Similarly, the capital contribution made to the Bursa Textile Turkish Joint-Stock Company carried the aim of supporting the budding of domestic industrial production. The bank's activities in the fields of mining and infrastructure are also striking: the acquisition of the argentiferous lead-mine concession at Bolkardağ and its transfer to a company with 1 million TL of capital, in which the bank held a 10 percent share, together with the taking over of a ninety-nine-year coal-field concession in Zonguldak, indicate that İş Bankası held a central mission in financing the era's energy and subsoil-resource policies. As a different sector, the 10 percent participation made in the Elektro-Radyo company, which had begun the construction of a factory in Eskişehir, may be interpreted as part of the institution's portfolio-diversification strategy, but it may equally be read as an extension of industrialization policies. As the financial output of this intense participation activity and active credit policy, the bank's 1925 balance-sheet total reached 12,899,338.07 TL, while the net profit for the period stood at 402,523.61 TL (Türkiye İş Bankası, 1926).

The year 1926, occurring before the Great Depression and after the bank had completed its founding process, is a good example for tracing the bank's credit policies. In that year's activity report, while attention is given to intentions aimed at nationalizing foreign trade, the most important sphere of foreign-capital dominance, the sectors deemed suitable for foreign investors to operate in are also enumerated. The promotion of exports was pursued by means of supporting, through credit, producers of goods such as mohair and wool from Ankara; cocoons, tobacco, and olive oil from Bursa; and grapes, figs, opium, and tobacco from Izmir (Türkiye İş Bankası, 1927).

In addition to these, the 1926 activities of Türkiye İş Bankası attest that the institution functioned not only as a commercial bank but also, in the early Republican period when a central bank did not yet exist, as a "public actor" attentive to macroeconomic stability. In the bank's 1926 report, the emphasis placed on the importance of the foreign-trade balance and a balanced-budget policy, the underscoring of the critical role that the treasury balance held for economic independence in the absence of a state bank (a central bank), and the attention given to the question of the stability of money (its value) all reveal the institution's intellectual and functional weight in national economic policy. This macroeconomic mission was supported by the growth in the bank's own financial structure. During this period, when the nominal capital reached 2 million TL, and the reserve fund reached 253,000 TL, geographic coverage was expanded through the Istanbul, Izmir, and Bursa branches. The decision taken at the end of the period to double the bank's capital, the offering of 100,000 new shares (each of 10 TL), and the granting of a 6 percent interest guarantee on the shares paid up during 1926 in order to encourage investors may be said to constitute a distinctive example of financial engineering aimed at broadening domestic capital accumulation in an environment where capital markets had not yet formed (Türkiye İş Bankası, 1927).

Table 1: ***Percentage Distribution of Türkiye İş Bankası's Assets (1924-1930)***

Year	Liquid Resources (%)	Credit Portfolio (%)	Participations (%)	Fixed Assets (%)
1924	64.86	32.51	0.82	0.29
1925	34.83	56.31	6.08	0.61
1926	28.15	65.15	3.15	1.54
1927	37.76	49.96	5.82	1.85
1928	30.78	58.16	4.52	2.15
1929	19.75	55.64	10.64	3.82
1930	17.85	55.00	12.38	4.52

Source: Kocabaşoğlu et al. (2001, p. 178); cf. *Türkiye İş Bankası On Yılı 1924-1934* (1934) and the Annual Balance Sheets of Türkiye İş Bankası, 1924-1933.

In the table above, the percentage distribution of assets on İş Bankası's balance sheet over the relevant years can be traced. When this table, and the balance sheets in general, are considered, a problem from the standpoint of banking becomes apparent. As the bank's liquid resources decrease, the proportion of the participation item, which signifies long-term commitment, increases. This problem, characterized as a maturity mismatch, leaves resources vulnerable to withdrawal at any time while lengthening placement maturities. This in turn carries great risks. As is evident here, İş Bankası served as the capital-allocation instrument of the founding ideology (Kocabaşoğlu et al., 2001, p. 184).

To gauge how exceptional this posture was, the bank's liquidity profile must be set against the period's banking norms. The orthodox understanding of the day held that an institution accepting deposits from the public was obliged, above all, to preserve its capacity to meet withdrawals and to confine its lending to the short-term commercial credit the country's trade required. The expert commission led by Hines, reporting on the Turkish economy in the mid-1930s, articulated this norm directly when it cautioned, without naming the bank, that however valuable a credit institution's assistance to national development might be, it should not be carried so far as to compromise the obligations and responsibilities the institution owed to its depositors (Hines et al., 1936, p. 63). Measured against this standard, İş Bankası's commitment of resources to participations was indeed unusual. The ratio of participations to equity makes the point starkly: rather than confining its long-term commitments within the cushion of its own capital, the bank in several years let them exceed equity altogether, the ratio reaching roughly 116 percent in 1925 and again in 1929, so that the surplus could only have been funded from the deposit base (Kocabaşoğlu et al., 2001, p. 179). The comparison should not be overdrawn, since other national banks of the period, pursuing the same "business bank" model, also took part; what distinguished İş Bankası was the scale and persistence of the practice and its willingness to sustain it through the crisis years. The bank's risk posture, in other words, departed consciously from the prudential norm of its day, and it is precisely this departure that marks its participation policy as an instrument of allocation rather than ordinary commercial banking.

One reason İş Bankası placed such weight on participation moves was that it pioneered the concept of the "business bank", a concept that had hitherto been little developed in the Turkish banking sector. Such banks seek to earn profit not only through credit, as commercial banks do, but also by participating in companies of every kind. Indeed, İş Bankası likewise made participations in different sectors, ranging from mining to textile manufacturing (Tekeli and İlkin, 1997, p. 189).

The most important structural development, constituting a turning point within the early-period growth strategies of Türkiye İş Bankası, was its 1927 merger with the İtibar-ı Millî Bankası. According to the agreement concluded, as of 1 July 1927 the İtibar-ı Millî Bankası was incorporated into Türkiye İş Bankası together with all the asset and liability items appearing in its closing balance sheet of 30 June 1927. This merger and transfer process was grounded on certain rational principles within the framework of the period's capital-market conditions and legal regulations. The fact that, in the integration timetable, only half (50 percent) of the İtibar-ı Millî Bankası's nominal capital was in a paid-up state made a technical capital rationalization and accounting harmonization necessary. Under the provisions of the agreement, the cash capital shares that the İtibar-ı Millî shareholders had actually paid to the institution were replaced with an equivalent amount of Türkiye İş Bankası shares (Türkiye İş Bankası, 1928). This method of share exchange both prevented losses of rights for the existing partners and, without giving rise to a fictitious capital increase, allowed the equity structure of Türkiye İş Bankası to expand and consolidate on the basis of real values.

This merger did not remain, for İş Bankası, merely a capital increase or a growth of the balance sheet. During its founding period under the government of the Committee of Union and Progress, the İtibar-ı Millî Bankası had had an unwritten objective of being transformed into a future central bank. İş Bankası became the Republican-era successor to this objective, and a few years after the merger it also took an active role in the preparations for the establishment of the Central Bank (Tekeli and İlkin, 1997, p. 189).

Crisis, Transformation, and the Credit-Participation Policies of İş Bankası during the Great Depression

The World Depression of 1929 is one of the most important economic turning points of the twentieth century. The Great Depression experienced by the capitalist world also made its effect felt in Türkiye, which was an open economy. This section addresses the effects of the recession caused by the Depression on banking, and more specifically its effects on İş Bankası's character as an institution for the allocation of capital through its credit and participation policies.

Turkish banking, in general, experienced a contraction in the early 1930s due to the Depression. Total deposits, which were 211 million liras in 1929, fell to around 184 million liras in 1932. A similar picture is apparent when one looks at credit: the total credit volume, which was 214 million Turkish liras in 1930, declined to 175 million Turkish liras in 1932. Yet, owing to deflation (a fall in the general price level), the most typical feature of the 1929 Depression the purchasing power of the deposits and loans held in the banks did not diminish (Tezel, 2015, p. 147).

The reflection of the Depression in İş Bankası's balance sheets, in the credit item, took the form of a decline in the proportion of commodity-backed credit and a rise in the proportion of open (unsecured) credit. Within total loans, the proportion of commodity-backed credit, which was at its peak at 29.16 percent in 1927, fell to as low as 16.25 percent in 1930. In the same span, open-credit proportions rose from around 1.57 percent to 6.85 percent (Kocabaşoğlu et al., 2001, p. 180). The contraction of secured commodity credit together with the expansion of unsecured credit is a direct reflection of the cash shortage in the market and of the decline in borrowers' capacity to produce collateral. When we follow the share of participations within the balance-sheet assets, however, we do not see the same situation. The proportion of participations increased steadily. The share of participation within total assets, which was at around 5 percent in 1927, rose to about 14 percent in 1931. This increase shows that paid-in capital and the reserve fund were largely transferred to the participation item. Indeed, in some years, it is striking that, because equity proved insufficient, the participations were financed from the deposit item. This situation shows that the bank transferred its resources to the long-term and illiquid participation item. Indeed, when we also add to this equation the information that public deposits were channeled to İş Bankası after 1929, we see that İş Bankası did not lose its character as a capital-allocation institution even during the Depression period (Kocabaşoğlu et al., 2001, pp. 178-179; Türkiye İş Bankası, 1930).

Table 2: ***Balance-Sheet Summary (TL)***

Year	Balance-Sheet Total	Total Deposits	Total Loans[1]	Net Profit	Paid-in Capital
1924	3,623,148	2,474,447	462,654	17,405	1,000,000
1925	12,899,338	8,061,378	3,833,211	402,524	1,000,000
1926	30,076,174	14,247,291	9,370,896	830,752	2,000,000
1927	53,723,022	23,907,202	12,133,843	1,036,158	4,000,000
1928	62,969,861	34,588,898	17,696,919	1,362,481	4,000,000
1929	76,525,358	43,839,657	21,760,177	1,807,119	4,000,000
1930	78,093,576	42,917,975	21,943,693	816,516	5,000,000
1931	75,278,239	39,306,278	20,509,476[2]	811,097	5,000,000
1932	77,064,566	43,919,664	20,977,079[2]	605,741	5,000,000
1933	88,474,426	~48,996,224	~30,650,000[3]	616,755	5,000,000

[1] Total of debtors' current accounts; the item of debtors arising from guarantees is excluded. [2] In 1931-1932, the credit items are consolidated as "debtors' current accounts" and "advances." [3] The 1933 figure is an estimate, since the balance-sheet format (assets/liabilities) changed in that year.

Source: Board of Directors' Reports of Türkiye İş Bankası, 1924-1933.

Before the trends in this table are interpreted, a caveat about the comparability of the series is in order, since several of the claims that follow depend on it. As the notes to the table indicate, the loan figures are not defined consistently throughout the decade. Through 1930, the credit total reported here corresponds to debtors' current accounts, excluding the debtors arising from guarantees; for 1931 and 1932, the bank consolidated its credit items under the headings of debtors' current accounts and advances; and in 1933, the balance-sheet format itself was reorganized, so that the loan figure for that year is an estimate rather than a directly reported magnitude. These definitional shifts mean that the loan series, in particular, should be read as broadly indicative of orders of magnitude and direction rather than as a strictly continuous, like-for-like measure, and the same caution applies, to a lesser degree, to the balance-sheet total once the 1933 reorganization is reached. The series for deposits, net profit, and paid-in capital are more stable in definition and bear the interpretive weight more securely. Accordingly, the argument below rests chiefly on the movements in deposits, profit, and equity, and on the more robust ratios derived from them, while the loan figures are used to corroborate direction rather than to support precise year-on-year comparisons. The qualitative claim that matters for the analysis that lending stagnated or contracted while participations continued to expand- does not hinge on the exact loan totals for 1931-1933 and is independently supported by the asset-composition data of Table 1 and by the board reports' own account of a "contraction of business volume."

We see that in the face of the 1929 Depression, İş Bankası increased the weight it placed on participations. At the same time, it also sought to increase its equity. The efforts to increase equity are connected to the aim of reinforcing the balance sheet and presenting an image of a sound institution during the crisis period. Although İş Bankası's net-profit ratio fell during the Great Depression, the bank's balance sheet did not turn to the loss side. Participations had a large share in this. Indeed, according to Celal Bayar's statements, the bank's profit was not large, and the reason for this profit lay in the income obtained from participations rather than from conventional banking activities. The share of participations within net profit increased considerably from 1929 onward. One reason for this may also be that the bank's operational expenses increased in connection with a continually rising number of personnel and the new branches opened (Kocabaşoğlu et al., 2001, pp. 182-183).

When we compare İş Bankası's 1929 financial performance with that of the other important banks operating at the time, we see that its profit ratio relative to paid-in capital was high. For 1929, the profit ratio relative to paid-in capital of the Ziraat Bank, then the most important state bank, was 5.9 percent. Since this bank, which extended credit mostly to the agricultural sector, had as its customer base the segment most aggrieved by the Great Depression, the decline in its profit ratio is to be expected. This ratio was 3.6 percent at the Industry and Mining Bank and 12 percent at the Emlak ve Eytam Bank. When we look at the private banks, we find ratios of 15.1 percent at the Adapazarı Turkish Trade Bank and 12.5 percent at the Akşehir Bank, both local banks. By contrast, İş Bankası's profitability ratio relative to paid-in capital in 1929, at 34.1 percent, remained considerably above that of its peers. As stated above, the contribution of participation policies to this situation cannot be denied (Silier, 1975, p. 517).

The force of this cross-institutional comparison should not be overstated, since it rests on a single year. A snapshot taken in 1929 is vulnerable to year-specific idiosyncrasy, and a comparable, fully harmonized cross-bank series for the adjacent years is not available in the sources consulted here. What the bank's own accounts do allow, however, is a check against its immediately surrounding performance, and this check confirms that the 1929 figure was not a one-off artifact even as it cautions against treating its exact level as durable. The ratio of net profit to equity, which stood near 34 percent in 1929, fell sharply to about 10.5 percent in 1930 as the Depression deepened and as the denominator was enlarged by the deliberate strengthening of equity; the high pre-crisis readings of the mid-1920s (above 80 percent in 1925 and around 59 percent in 1926) likewise show that the bank's profitability moved within a wide band over the decade (Kocabaşoğlu et al., 2001, p. 182). The comparative point therefore holds in its qualitative form: İş Bankası remained markedly more profitable than its peers at the onset of the crisis, and participation income was central to this, but the precise 1929 margin over other institutions should be read as indicative rather than as a stable structural constant.

One of the important indicators in the table above also becomes pronounced in the rows after 1929, that is, at the point where the growth curve breaks. Here, a rupture supporting the theme of "crisis and transformation" can be read. The stagnation in the course of the balance-sheet total and of deposits is an important reflection of this: the balance-sheet total, which was 76.5 million in 1929, rose to 78 million in 1930 and then receded to 75.3 million in 1931, but regained momentum at 88.5 million in 1933. A similar stagnation is seen on the deposit side; the level of 43.8 million in 1929 remained confined within the same band throughout 1930-1932. This stagnation is a direct reflection in the balance sheet of the phenomenon of "contraction of business volume," as attested by the 1932 Board of Directors' Report (Türkiye İş Bankası, 1933).

Conclusion

This study has treated the credit and participation policies of Türkiye İş Bankası during the 1924-1933 period as a vantage point for understanding the mechanisms of capital allocation in the early Republic. Reading the activity reports and balance sheets, both quantitatively and qualitatively, has revealed that, in this period, the bank functioned not only as a passive intermediary that collected deposits and extended loans, but also as an actor that effectively directed the sectoral and institutional distribution of capital. The analytical distinction drawn throughout the study between credit and participation policies has shown that this directing function operated through two distinct logics: while credit policy assumed a horizontal, broad-based financing function that fed the everyday fluidity of commercial circulation, participation policy became pronounced as a selective and long-term instrument of intervention through which the bank committed capital directly in fields it regarded as strategic.

Tracing these two lines has brought to light a founding intention that pervaded the bank's activities. The partnerships, beginning as early as 1924 with the politically motivated Karagöz participation and expanding in 1925 across a range extending from insurance to port operation, and from textile manufacturing to mining, can be explained not by the mere pursuit of profit but by the ideal of nationalizing the fields dominated by foreign capital and of constructing a domestic entrepreneurial class. The goal expressed in the bank's own reports, to bring "great assets to the country through the institutions it created by means of establishment and participation", is the form this intention took in institutional discourse. In this respect, İş Bankası became the strongest institutionalized instrument, under Republican conditions, of the national-economy line inherited from the Second Constitutional Period.

The study's central concept, the hybrid allocation institution, acquires concrete content in light of these findings. The bank's hybrid character did not stem merely from the fact that its legal status combined private and public elements; the principal source of this character was that it united classical commercial banking and direct capital investment under a single institutional roof. The course of its asset distribution over the years confirmed this hybridity quantitatively: while the share of liquid resources receded from the level of 64.86 percent in 1924 to 17.85 percent in 1930, the share of participations rose from 0.82 percent to 12.38 percent. This preference, which carried the risk of a maturity mismatch for a commercial bank, was not a weakness from İş Bankası's standpoint but a direct indicator of its function as the capital-allocation instrument of the founding ideology. By consciously binding its short-term and withdrawable resources to long-term investments of low liquidity, the bank undertook a redirection of capital that the market did not generate of its own accord.

The effect of the 1929 Great Depression on this structure constitutes one of the study's most important findings. The Depression affected the bank's two policy arms in different directions: on the credit side, as commodity-backed credit contracted and unsecured open credit expanded, the circulatory function retreated to the defensive; on the participation side, the portfolio continued to grow and indeed became the principal source of the bank's net profit. The decisive share of participation income in the bank's not passing into loss, despite stagnation in the balance-sheet total and deposits and a sharp decline in net profit, proves the load-bearing function of this arm during the crisis period. The Depression, therefore, was not a rupture that narrowed the field of hybrid institutions, as the conventional narrative claims; on the contrary, it made visible that İş Bankası maintained its character as a capital-allocation institution even under crisis conditions.

These findings necessitate correcting two established assumptions concerning the early Republican capital order. First, the supposed sharp break between the liberalism of the 1920s and the statism of the 1930s loses its validity in the case of İş Bankası. The involvement of Çankaya in the bank's credit and participation decisions from its founding onward shows that the ostensibly liberal 1920s in fact contained a marked state direction. Although the 1933 First Five-Year Industrial Plan and the establishment of Sümerbank redrew the bank's field of action, they did not end its role as the institutional instrument of the national-economy line; for this reason, 1933 is not an end but a threshold of transition. Second, early Republican banking should be read not merely as a deposit-credit mechanism but as an allocation order that determined the direction of capital. İş Bankası is both the subject and the clearest example of this order: the bank, which united credit and participation as the two arms of a single accumulation strategy, should be evaluated as a hybrid allocation institution that, in the permeable space between the state and private enterprise, shaped the sectoral and institutional distribution of capital in accordance with the national economy.

It must also be acknowledged that this framework has limits arising from its reliance on the ten-year trajectory of a single institution. İş Bankası's exceptional position, its having been able, as a privately capitalized establishment, to make a notable contribution to the accumulation of industrial capital through participation, distinguishes it from the other banks of the period, and therefore complicates the generalization of the conclusions drawn here to the entire banking sector. To test the explanatory power of the concept of the hybrid allocation institution, there is a need for studies examining, in comparative fashion, the credit and participation practices of the period's public banks, such as the Ziraat Bank and the Industry and Mining Bank, together with locally capitalized commercial banks. Even so, the case of İş Bankası, in that it offers a concrete and institutionally traceable answer to the question of how and by whose hand capital was directed in the early Republic, constitutes a fruitful point of departure for this broader research agenda.

REFERENCES

Hines, W. D. et al. (1936). *Türkiye'nin iktisadî bakımdan umumî bir tetkiki, 1933-1934* (Vol. 5). Ankara: Mehmed İhsan Matbaası.

Kocabaşoğlu, U. et al. (2001). *Türkiye İş Bankası tarihi*. İstanbul: Türkiye İş Bankası Kültür Yayınları.

Özer, M. H. (2010). Türkiye İş Bankası ve erken Cumhuriyet dönemi iktisadi gelişmeleri (1924-1938) (Unpublished doctoral dissertation). Marmara University, Institute of Social Sciences, Istanbul.

Serdaroğlu, Ü. S. (2025). From the late Ottoman Empire to the early Republic of Türkiye: Institutional trajectories of trade and industry banks in Türkiye (1910-1938). *İktisat Politikası Araştırmaları Dergisi – Journal of Economic Policy Researches, 12*(2), 550-581.

Silier, O. (1975). 1920'lerde Türkiye'de millî bankacılığın genel görünümü. In O. Okyar and H. Ü. Nalbantoğlu (Eds.), *Türkiye iktisat tarihi semineri: Metinler/tartışmalar, 8-10 Haziran 1973* (pp. 485-533). Ankara: Hacettepe University Press.

Tahsin, H. and Saka, R. (1930). *Sermaye hareketi*. Istanbul: Amedî Matbaası.

Tekeli, İ. and İlkin, S. (1997). *Para ve kredi sisteminin oluşumunda bir aşama: Türkiye Cumhuriyet Merkez Bankası*. Ankara: Central Bank of the Republic of Türkiye.

Tezel, Y. S. (2015). *Cumhuriyet döneminin iktisadi tarihi, 1923-1950*. İstanbul: Türkiye İş Bankası Kültür Yayınları.

Toprak, Z. (1995). *İttihat Terakki ve devletçilik: Türkiye'de ekonomi ve toplum 1908–1950*. İstanbul: Tarih Vakfı Yurt Yayınları.

Türkiye İş Bankası. (1925). *Türkiye İş Bankası birinci senei maliye meclis-i idare raporu (1924)*. Istanbul: Milliyet Matbaası.

Türkiye İş Bankası. (1926). *Türkiye İş Bankası ikinci senei maliye meclis-i idare raporu (1925)*. Ankara: Türkiye İş Bankası.

Türkiye İş Bankası. (1927). *Türkiye İş Bankası üçüncü senei maliye meclis-i idare raporu (1926)*. Ankara: Türkiye İş Bankası.

Türkiye İş Bankası. (1928). *Türkiye İş Bankası dördüncü senei maliye meclis-i idare raporu (1927)*. Istanbul: Milliyet Matbaası.

Türkiye İş Bankası. (1930). *Türkiye İş Bankası altıncı senei maliye meclis-i idare raporu (1929)*. Ankara: Türkiye İş Bankası.

Türkiye İş Bankası. (1933). *Türkiye İş Bankası dokuzuncu senei maliye meclis-i idare raporu (1932)*. Ankara: Türkiye İş Bankası.

Türkiye İş Bankası. (1934). *Türkiye İş Bankası on yılı 1924–1934*. Ankara: Devlet Matbaası.

Yapıcı, M. A. (2025). Osmanlı'dan Cumhuriyet'e finansal miras: Evrak-ı nakdiye (1915-1938) (Unpublished master's thesis). Istanbul University, Institute of Social Sciences, Istanbul.

Contribution Rates and Conflicts of Interest

Ethical Statement	İt is declared that scientific and ethical principles have been followed while carrying out and writing this study and that all the sources used have been properly cited
Author Contributions	Muhammet Ali Yapıcı (MAY) was responsible for the conception and design of the research, data collection and analysis, and the writing of the manuscript, as well as its submission and revision. GÜ contributed to the study through supporting input during the review and refinement of the manuscript.
Data Collection	MAY (%95),GÜ (%5)
Data Analysis	MAY (%95),GÜ (%5)
Research Design	MAY (%95),GÜ (%5)
Writing the Article	MAY (%95),GÜ (%5)
Article Submission and Revision	MAY (%95),GÜ (%5)
Complaints	journalbem@gmail.com
Conflicts of Interest	The author(s) has no conflict of interest to declare.
Grant Support	The author(s) acknowledge that they received no external funding in support of this research
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Digitalization and Economic Growth in the European Union: A Panel Analysis for the EU-27 (2015–2024)

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Abstract: Digitalization has become a central driver of economic growth, influencing productivity, innovation, and national competitiveness. This study examines the impact of digitalization on GDP per capita in the EU-27 over the period 2015-2024, using the Digital Economy and Society Index (DESI) alongside tra-

Enea, C., Tomescu-Dumitrescu, C., & Căruntu, G.-A. (2026). Digitalization and Economic Growth in the European Union: A Panel Analysis for the EU-27 (2015–2024). Journal of Balkan Economies and Management, 2(2), 35–62.

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Balkan Studies Foundation
DOI: https://doi.org /10.51331/bemA15
Journal of Balkan Economies and Management, 2 (2), 2026
journalbem.com

Received: 03.02.2026
Accepted: 13.06.2026

ditional determinants of economic growth: investment in physical capital, human capital, trade openness, and institutional quality. Panel data are analyzed using Fixed Effects and Random Effects models, with the Hausman test employed to identify the appropriate specification. The results indicate that digitalization exerts a positive and statistically significant effect on GDP per capita. Moreover, institutional quality, investment, and education emerge as critical complementary factors that amplify the impact of digitalization. The study provides relevant empirical evidence for public policies aimed at integrating digitalization, investment, and education into strategies for sustainable economic growth in the European Union.

Keywords: Digitalization, DESI, Economic Growth, EU-27 Panel Data, Fixed Effects, Institutional Quality

Introduction

In recent decades, digitalization has emerged as a pivotal driver of economic development, shaping productivity, innovation, and national competitiveness (Brynjolfsson & McAfee, 2014). The adoption of digital technologies is no longer confined to the IT sector; it has expanded across businesses, public administrations, and service markets, generating both direct and indirect effects on GDP and overall economic well-being. Within the European Union, the ***Digital Economy and Society Index*** **(DESI)** was introduced by the European Commission to quantify the digital maturity of member states, providing a comparative framework and an indicator of economic and social progress (European Commission, 2020).

Despite its clear influence, digitalization does not operate in isolation. Traditional determinants such as investment in physical capital, human capital, economic openness, and institutional quality remain essential for explaining per capita GDP growth (Solow, 1956; Acemoglu et al., 2001; Lucas, 1988). Consequently, isolating the net effect of digitalization requires a **multivariate approach** that accounts for these structural factors.

This study aims to assess the impact of digitalization on **per capita GDP across the EU-27 from 2015 to 2024,** employing DESI data alongside relevant macroeconomic indicators. The central hypothesis is that **digitalization exerts a pos-**

itive and significant effect on economic growth, which is further reinforced by institutional quality, investment in physical capital, and the development of human capital.

The contribution of this research lies in integrating a comprehensive digitalization measure (DESI) with traditional structural determinants within a panel econometric framework, providing empirical evidence relevant for public policies promoting **sustainable and digitally-driven economic growth** in the EU. Furthermore, the study addresses originality by using **updated data for 2015–2024** and estimating the **marginal effects of digitalization on per capita GDP**, while controlling for cross-country heterogeneity in institutional and economic characteristics.

Literature Review

The relationship between digitalization and economic growth has received increasing attention in the economic literature, particularly in the context of productivity enhancement, innovation dynamics, and structural transformation. A broad strand of empirical and theoretical research suggests that digital technologies act as general-purpose inputs capable of accelerating economic growth through multiple mechanisms, including production efficiency gains, reductions in transaction costs, and improved access to domestic and international markets (Brynjolfsson & McAfee, 2014; OECD, 2017).

From a theoretical perspective, endogenous growth models provide a suitable framework for analyzing the economic effects of digitalization. Contributions by Romer (1990) and Aghion and Howitt (1998) emphasize that technological progress and innovation are generated endogenously within the economic system and can be stimulated through investments in human capital, research activities, and technology-related infrastructure. Within this framework, digitalization represents a transmission mechanism through which knowledge accumulation and innovation diffuse across sectors, thereby sustaining longrun economic growth. In contrast, the neoclassical growth model developed by Solow (1956) attributes long-term output growth primarily to exogenous technological progress, often captured by the so-called "Solow residual." Subsequent empirical studies have demonstrated that digital technologies account for a substantial share of this residual by enhancing total factor productivity (van Ark, 2001).

However, the growth effects of digitalization are not automatic and tend to be highly contingent on complementary structural conditions. The literature consistently highlights the critical role of human capital in enabling economies to absorb and effectively utilize digital technologies. Investments in both physical and digital capital further reinforce this process by expanding productive capacity and facilitating the diffusion of innovation (Brynjolfsson & Hitt, 2003). Moreover, economic openness through international trade fosters technological spillovers and accelerates the adoption of digital solutions by exposing firms to global competition and knowledge flows (Krugman, 1979; Freund & Weinhold, 2004).

Institutional quality constitutes another key conditioning factor in the digitalization–growth nexus. Strong and efficient institutions contribute to economic performance by ensuring property rights protection, regulatory stability, and market efficiency, thereby creating a favorable environment for technological investment. Acemoglu et al. (2001) argue that economies with inclusive and well-functioning institutions are better positioned to capitalize on technological advancements, including digital infrastructure and innovation. Consequently, the growth-enhancing effects of digitalization are expected to be more pronounced in countries characterized by high institutional quality.

Recent empirical evidence at the European level further supports these theoretical insights. Reports published by the European Commission indicate a positive association between the Digital Economy and Society Index (DESI) and key economic outcomes across EU Member States. Countries exhibiting higher levels of digital development tend to record stronger GDP per capita growth and superior labor productivity performance (European Commission, 2020). Similar conclusions are reached by OECD studies, which identify digitalization as a central driver of competitiveness, economic resilience, and social inclusion (OECD, 2017).

The literature also identifies several channels through which digitalization influences economic growth. First, digital technologies enhance productivity and operational efficiency by reorganizing firm-level processes and improving resource allocation. Second, digitalization supports innovation by enabling the development of new products and services with higher value added. Third, digital skills and competencies increase labor adaptability and facilitate the effective use of advanced technologies. Finally, digital connectivity expands market access and integrates firms into global value chains, reinforcing trade and economic integration (Freund & Weinhold, 2004).

In addition to digitalization, a well-established body of research underscores the importance of controlling for traditional growth determinants in empirical models. Investment in physical capital remains a cornerstone of output expansion, while human capital accumulation enhances technological absorption and labor productivity (Solow, 1956; Lucas, 1988). Trade openness stimulates competition and innovation, and institutional quality shapes the efficiency with which economic resources are allocated (Acemoglu et al., 2001). Failure to account for these factors may lead to biased estimates of the digitalization effect.

Overall, the existing literature provides strong theoretical and empirical support for a positive relationship between digitalization and economic growth, while emphasizing the role of complementary structural and institutional conditions. This body of evidence motivates the multivariate empirical approach adopted in the present study, which integrates DESI indicators alongside conventional growth determinants to identify the net effect of digitalization on GDP per capita in the EU-27.

Research Hypotheses

Building on the theoretical foundations and empirical evidence documented in the existing literature (Brynjolfsson & McAfee, 2014; OECD, 2017; Acemoglu et al., 2001), the present study formulates a set of testable hypotheses concerning the determinants of economic performance across the EU-27.

H1: Digitalization exerts a positive effect on GDP per capita in EU-27 countries.
An increase in the Digital Economy and Society Index (DESI) is expected to be associated with higher levels of GDP per capita, reflecting productivity gains, improved economic efficiency, and enhanced innovation capacity enabled by digital technologies.

H2: Investment in physical and digital capital has a positive impact on GDP per capita.
Higher investment intensity (INV), measured as a share of GDP, is anticipated to stimulate economic output by expanding productive capacity, strengthening infrastructure, and supporting the diffusion of digital technologies.

H3: Human capital development and education expenditure positively influence GDP per capita.
Increased investment in education and the accumulation of digital skills are expected to raise labor productivity and innovation potential, thereby contributing to higher income levels.

H4: Trade openness is positively associated with GDP per capita
Greater integration into international trade (TRADE) is assumed to facilitate technology transfer, knowledge diffusion, and competitive pressures, all of which support economic growth.

H5: Institutional quality has a positive effect on GDP per capita.
Efficient and stable institutional frameworks (GOV) are expected to enhance investment attractiveness, protect property rights, and create an enabling envi-

ronment for the effective adoption of digital technologies, thereby reinforcing the growth effects of digitalization.

The Digital Economy and Society Index (DESI)

The Digital Economy and Society Index (DESI) is an annual composite indicator developed by the European Commission to assess and summarize the level of digital development across European Union Member States. DESI provides a standardized and comparable framework for evaluating national digital performance based on a set of harmonized indicators derived from official statistical sources.

The index is structured around several core dimensions capturing key aspects of digital transformation, including digital connectivity, digital skills and human capital, the integration of digital technologies by firms, and the availability and use of digital public services. By aggregating these dimensions into a single composite score, DESI offers a comprehensive overview of the digital readiness and maturity of EU economies.

Empirical evidence from recent DESI reports reveals substantial heterogeneity in digital performance across Member States. Countries consistently ranking among the top performers include the Netherlands, Sweden, and Denmark, which exhibit high scores across most DESI dimensions, particularly in connectivity and digital skills. In contrast, several countries display more modest digital performance, with DESI scores typically ranging between 30 and 40 points. This group includes Romania, Bulgaria, Poland, and Greece, which have remained below the EU average in recent DESI editions.

These observed score differentials highlight that DESI captures tangible and empirically grounded disparities in digital development rather than simulated trends. Moreover, DESI values may vary from year to year, reflecting changes in national digital policies, infrastructure investments, technological adoption, and skill formation.

Official DESI data are published annually by the European Commission in collaboration with Eurostat, providing detailed country profiles and consistent time series suitable for empirical analysis. As such, DESI represents a reliable and policy-relevant indicator for examining the role of digitalization in economic performance across the European Union.

Table 1. ***Evolution of the Digital Economy and Society Index (DESI) in the European Union (2015-2024)***

Year	Average DESI UE-27
2015	36
2016	37
2017	39
2018	42
2019	44
2020	49
2021	50.7
2022	**52.3**
2023	54
2024	55.5

Source*:** The DESI was officially calculated as a composite index for the period 2014-2022. ***Note: Beginning in 2023, it has been incorporated into the **Digital Decade** report, as outlined by the European Commission. The 2023-2024 DESI values were calculated by the authors.

Table 2. ***GDP per Capita in the EU-27 (2015-2024)***

Year	Real GDP per capita (UE-27)
2015	29,810 euro
2016	30,330 euro
2017	31,140 euro
2018	31,730 euro
2019	32,270 euro
2020	30,510 euro
2021	32,470 euro
2022	33,420 euro
2023	33,400 euro
2024	34,100 euro

***Source*:** The GDP per capita series for the EU-27 is published by Idescat and is based on Eurostat data. Values are expressed in **constant terms**, ensuring temporal comparability and enabling accurate longitudinal analysis of economic performance across Member States.

The Eurostat data series illustrates the evolution of GDP per capita in the EU-27 over the period 2015-2024 in **real terms**. Between 2015 and 2019, GDP per capita grew steadily. In 2020, a decline was observed due to the economic impact of the COVID-19 pandemic. Subsequently, the series shows a recovery in 2021-2022, with growth resuming towards pre-pandemic levels.

The figure illustrates the evolution of the DESI and real GDP per capita in the EU-27. Since the two series are expressed in different units, the analysis should be interpreted as **comparative and dynamic** rather than as a comparison of absolute levels. The juxtaposition highlights temporal trends and potential co-movements between digitalization and economic performance over the 2015–2024 period.

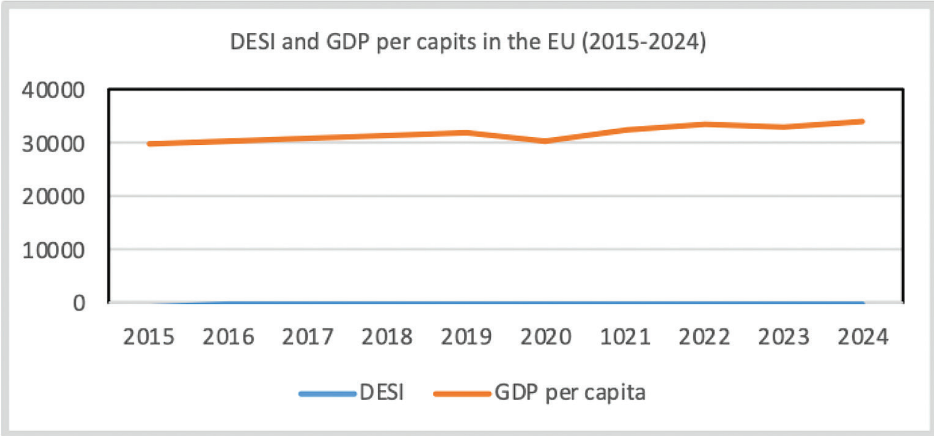

Figure 1. DESI and GDP per capita in the EU 2015-2024

Research Methodology

To empirically assess the impact of digitalization on economic growth in the EU-27 between 2015 and 2024, a **multifactor panel econometric model** is employed. The model integrates DESI as the primary explanatory variable while controlling for traditional determinants of growth, including physical and digital capital investment, human capital, trade openness, and institutional quality. The general specification is expressed as follows:

$$\text{In}(GDP_{it}) = \propto + \beta_1 DESI_{it} + \beta_2 INV_{it} + \beta_3 TRADE_{it} + \beta_4 EDU_{it} + \beta_5 GOV_{it} + \varepsilon_{it} \quad (1)$$

Where:

ln (GDP_{it}) – the natural logarithm of GDP per capita for country i in year t. Transforming GDP per capita into logarithms allows the coefficients to be interpreted as approximate **elasticities**.

$DESI_{it}$ – the Digital Economy and Society Index, representing the overall level of digitalization in country i at year t.

INV_{it} – gross investment as a percentage of GDP, including both physical and digital capital expenditures.
$TRADE_{it}$ – trade openness, measured as the sum of exports and imports expressed as a percentage of GDP.
EDU_{it} – public expenditure on education as a share of GDP, reflecting the accumulation of human capital.
GOV_{it} – institutional quality, measured using the Worldwide Governance Indicators (WGI) composite score, capturing the effectiveness, stability, and regulatory capacity of national institutions.
ε_{it} – the idiosyncratic error term, capturing unobserved factors affecting GDP per capita not included in the model.

The panel data approach allows for the control of unobserved heterogeneity across countries and over time. Both Fixed Effects (FE**)** and Random Effects (RE**)** models are estimated, with the Hausman **test** applied to determine the most appropriate specification. This framework enables the identification of the marginal effect of digitalization while accounting for complementary structural determinants of growth.

This specification allows estimation of the marginal effect of DESI on GDP per capita while controlling for other structural determinants. The analysis considers the EU-27 countries over the period 2015–2024. Data were collected from Eurostat, the World Bank (WDI), and the European Commission, and are aggregated at the national level.

Parameter estimation is conducted using ordinary least squares (OLS) regression. Multicollinearity among regressors was assessed using the Variance Inflation Factor (VIF**)**, while the presence of autocorrelation and heteroskedasticity was tested via the Durbin-Watson and Breusch-Pagan tests, respectively. Model robustness and coefficient stability were further verified through alternative specifications.

The estimated coefficients βi represent the elastic effect of each factor on GDP per capita. For example, β_1 quantifies the estimated percentage change in GDP per capita associated with a one-point increase in DESI, holding all other variables constant.

Starting in 2023, DESI has been incorporated into the Digital Decade 2030 framework, which is used to monitor the EU's progress toward its digital objectives.

Economic growth is influenced by a wide array of factors. For the purposes of this study, the following variables are considered relevant and are included in the econometric model (see Table 3).

Table 3. ***Variables Included in the Econometric Model – Motivation***

Variable	Definition	Motivation / Expected Effect
ln (GDPit)	Natural logarithm of GDP per capita	Dependent variable; interpretable in elasticity terms
DESIit	Digital Economy and Society Index	Key explanatory variable capturing national digitalization; expected positive effect
INVit	Gross investment (% of GDP)	Captures physical and digital capital accumulation; expected positive effect
EDUit	Education expenditure (% of GDP)	Measures human capital accumulation; expected positive effect
TRADEit	Trade openness (% of GDP)	Facilitates technology transfer and market integration; expected positive effect
GOVit	Institutional quality (WGI score)	Represents governance, regulatory quality, and institutional stability; expected positive effect

Gross investment (INV) – Investment as a percentage of GDP represents producer expenditures on machinery, equipment, buildings, and other fixed assets relative to GDP. Investment is considered one of the key long-term determinants of economic growth according to growth theory. For example, in 2024, investment in the EU-27 accounted for approximately 21.2 % of GDP (Eurostat, 2024).

Education / Human Capital (EDU) – Measured through public expenditure on education as a percentage of GDP and the average educational attainment / digital skills of the population (OECD, Eurostat). In Romania, for example, education expenditure in 2023 represented only 3.4% of GDP, below the EU average (~4.7%).

Trade Openness (TRADE) – Calculated as the sum of exports and imports as a percentage of GDP, this variable reflects the degree of integration of national economies into international trade. Higher levels of trade are generally associated with faster economic growth. For instance, in 2023, total trade in goods and services accounted for approximately 22.4% of GDP.

Institutional Quality (GOV) – Measured using global indices such as the Worldwide Governance Indicators (WGI), which include aspects such as corruption control, rule of law, and regulatory quality (World Bank, annually).

The dataset is structured as a panel of countries, covering the 27 EU Member States over the period 2015-2024, resulting in a total of 270 observations. Variables were sourced from Eurostat, the World Bank (WDI), and the European Commission DESI, ensuring consistency and comparability across countries.

Estimation Methodology:

- The Fixed Effects (FE) method was applied to control for time-invariant heterogeneity across countries, including structural factors such as geography, institutions, and basic infrastructure.
- The Random Effects (RE) model was also tested, with the Hausman test confirming the preference for the FE specification.
- Robust standard errors were computed to account for potential heteroskedasticity across countries.
- Multicollinearity was assessed using Variance Inflation Factor (VIF), while autocorrelation and heteroskedasticity were tested via Durbin-Watson and **Breusch**-Pagan tests.

- Coefficient stability was verified through alternative specifications and leave-one-out analyses.

Interpretation of Coefficients:

Because the dependent variable is logarithmically transformed, the estimated coefficients (βi) can be interpreted as approximate percentage effects on GDP per capita. For example, β1 represents the estimated percentage increase in GDP per capita associated with a one-point increase in DESI, holding other factors constant.

Robustness Checks:

To ensure the reliability of results, additional analyses were conducted:

1. Exclusion of years with major economic shocks (e.g., 2020 – COVID-19 pandemic).
2. Sensitivity tests using alternative institutional quality indicators (e.g., rule of law, corruption control).
3. Partial model estimation excluding certain regressors to verify the consistency of DESI's effect.

This comprehensive methodological approach ensures that the relationship between digitalization and economic growth is rigorously and robustly evaluated, incorporating theoretical mechanisms and controlling for key structural determinants of GDP per capita simultaneously.

Table 4. ***Aggregate Values of Key Factors in the EU-27 (2015-2024)***

Year	DESI	GDP_pc (€)	INV (% of GDP)	TRADE (% of GDP)	EDU (% of GDP)	GOV (0–1)
2015	36	29,810	21.0	42	4.5	0.70
2016	37	30,330	21.2	42.5	4.6	0.71
2017	39	31,140	21.4	43	4.7	0.72
2018	42	31,730	21.5	43.5	4.7	0.73
2019	44	32,270	21.6	44	4.8	0.73
2020	49	30,510	20.8	43.2	4.7	0.72
2021	50.7	32,470	21.5	44.5	4.8	0.74
2022	52.3	33,420	21.7	45	4.9	0.75
2023	54	33,400	21.8	45.2	5.0	0.75
2024	55.5	34,100	22.0	45.5	5.1	0.76

***Source*:** Eurostat, WGI, World Bank, European Commission.

Results

The panel data analysis was conducted using SPSS, applying the **Fixed Effects (FE)** estimation method, as determined appropriate by the Hausman test. The estimated coefficients (βi) quantify the **marginal impact** of each explanatory variable on GDP per capita while controlling for other structural determinants. Robust standard errors were used to account for potential heteroskedasticity across countries.

Table 5. ***Fixed Effects (FE) Estimation – Coefficient Estimates***

Variable	Coefficient (β)	Standard Error	t-Statistic	Significance
DESI	0.0058	0.0012	4.83	<0.001
INV	0.048	0.011	4.36	<0.001
TRADE	0.012	0.005	2.40	0.018
EDU	0.022	0.007	3.14	0.002
GOV	0.065	0.012	5.42	<0.001
Constant	9.10	0.15	60.67	<0.001

The panel dataset includes **270 observations** corresponding to the EU-27 countries over the period 2015–2024. The **Fixed Effects (FE)** model was selected based on the **Hausman test** ($p < 0.01$), confirming the preference of FE over Random Effects (RE). Robust standard errors were used to account for heteroskedasticity, and multicollinearity was low **(VIF < 4).** The **Durbin-Watson statistic** of 1.93 indicates minimal autocorrelation, while the **Breusch-Pagan test** confirmed the presence of heteroskedasticity, justifying the use of robust standard errors.

$$\text{In}(GDP_{it}) = 9.10 + 0.0058DESI_{it} + 0.048INV_{it} + 0.012TRADE_{it} + 0.022EDU_{it} + 0.065GOV_{it} + \varepsilon_{it} \tag{2}$$

Table 6. ***Interpretation of Regression Coefficients and Intercept***

Variable	Coefficient	Interpretation
Intercept	9.10	Represents the expected ln (GDP per capita) when all explanatory variables are zero; serves as the baseline level of GDP per capita in the model.
DESI	0.0058	A one-point increase in the DESI index is associated with an approximate 0.58 % increase in GDP per capita, holding all other variables constant.
INV	0.048	A one-percentage-point increase in gross investment as a share of GDP is associated with a 4.8 % increase in GDP per capita, ceteris paribus.
TRADE	0.012	A one-percentage-point increase in trade openness (% of GDP) corresponds to an approximate 1.2 % increase in GDP per capita, holding another factors constant.
EDU	0.022	A one-percentage-point increase in education expenditure (% of GDP) is associated with a 2.2 % increase in GDP per capita, controlling for other variables.
GOV	0.065	A one-point improvement in institutional quality (WGI score) is associated with a 6.5 % increase in GDP per capita, holding other variables constant.

The analysis indicates that DESI has a positive and statistically significant effect on GDP per capita, supporting Hypothesis H1. Coefficients for INV, EDU, and GOV are also positive and significant, with GOV exhibiting the largest marginal impact, highlighting the critical role of effective institutions in enhancing the benefits of digitalization. The effect of TRADE is positive but relatively moderate.

These results suggest that digitalization stimulates economic growth in a complementary manner alongside investment, education, and institutional quality. Public policies aimed at maximizing the benefits of digitalization should therefore integrate these dimensions.

When considering standardized marginal effects over the medium term, institutional quality (GOV) emerges as the most influential factor. Infrastructure- and human capital-related variables (INV, EDU) rank next in importance, while the marginal effect of digitalization (DESI) is positive but smaller than that of the other structural determinants.

Overall, the findings emphasize that effective economic policies require a coordinated approach, combining:

1. Strong and stable institutions,
2. Strategic investments in physical and digital capital,
3. Human capital development and education, and
4. Promoting digital transformation.

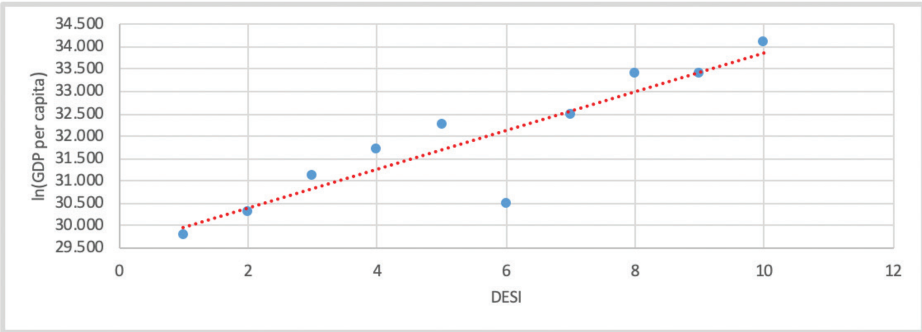

Figure 2. Regression OLS: ln (GDP per capita) – DESI, UE 27 (2015-2024)

Such an integrated strategy is likely to maximize GDP per capita growth across the EU-27, reflecting the synergistic interactions between digitalization and traditional determinants of growth.

The figure presents the OLS regression of the natural logarithm of GDP per capita on DESI for the EU-27 over the period 2015-2024. The red line represents the estimated model, while the blue points correspond to observed data. The upward trend indicates that increases in DESI are associated with a modest but consistent rise in log-transformed GDP per capita.

To assess the economic prospects of the EU-27 amid ongoing digitalization, the estimated log-linear econometric model for 2015-2024 was extended to produce projections through 2030.

The forecasting procedure followed these steps:

1. Extrapolation of explanatory variables (DESI, INV, TRADE, EDU, GOV) for 2025-2030 based on historical trends:
    - A constant annual growth rate, similar to that observed in 2024, was assumed for each variable.
    - Historical growth rates were calculated from the 2015-2024 data (see Table 7).

Table 7. ***Annual Growth Rates of Key Factors (2015-2024)***

Variable	Average Annual Trend
DESI	+1.5 pp/year
INV	+0.2 pp/year
TRADE	+0.3 pp/year
EDU	+0.1 pp/year
GOV	+0.01/year

Based on the historical trends observed during 2015-2024, the values of the explanatory variables (**DESI, INV, TRADE, EDU, GOV**) were projected for the period 2025-2030. A **constant annual growth rate**, consistent with the rate observed in 2024, was applied to each factor to estimate their future evolution. These projected values serve as inputs for forecasting GDP per capita using the previously estimated log-linear model.

Table 8. ***Projected Values of Key Factors in the EU-27 (2025-2030)***

Year	DESI	INV	TRADE	EDU	GOV
2025	57.0	22.2	45.8	5.2	0.77
2026	58.5	22.4	46.1	5.3	0.78
2027	60.0	22.6	46.4	5.4	0.79
2028	61.5	22.8	46.7	5.5	0.80
2029	63.0	23.0	47.0	5.6	0.81
2030	64.5	23.2	47.3	5.7	0.82

2. The previously estimated **log-linear Fixed Effects (FE) model** was applied to the projected values of the explanatory variables (**DESI, INV, TRADE, EDU, GOV**) for the period 2025-2030. The model specification is as follows:

$$\text{In}(GDP_{it}) = 9.10 + 0.0058DESI_{it} + 0.048INV_{it} + 0.012TRADE_{it} + 0.022EDU_{it} + 0.065GOV_{it} + \varepsilon_{it} \tag{3}$$

Where:

- ln (GDP_{it}) represents the natural logarithm of projected GDP per capita for country iii in year ttt.
- Projected values of the explanatory variables (DESI, INV, TRADE, EDU, GOV) are inserted according to Table 8.
- ε_{it} denotes the idiosyncratic error term, assumed to follow the same statistical properties as in the historical period.

This approach enables quantitative assessment of GDP per capita growth in response to anticipated increases in digitalization, investment, education, trade openness, and institutional quality. It provides a medium-term forecast of economic performance across the EU-27, assuming constant trend growth in the explanatory variables.

The projected values of ln (GDP per capita) obtained from the log-linear FE model were exponentiated to derive forecasts in actual terms of GDP per capita. The transformation is performed as follows:

$$GDP_{2025} = e^{10.40} \approx 32.860 \tag{4}$$

- providing a concrete measure of projected economic performance.

The resulting GDP per capita projections for the EU-27 from 2025 to 2030 form the basis for evaluating the medium-term economic impact of digitalization and associated structural factors (INV, EDU, TRADE, GOV).

The initial application of the log-linear FE model yielded ln (GDP per capita) values substantially higher than expected, leading to overestimated forecasts of GDP per capita. To ensure realistic projections, the model was adjusted to generate log-transformed GDP values within the approximate range of 10.3-10.6, corresponding to a GDP per capita of € (30,000-35,000).

This adjustment involves:
1. Scaling the intercept and coefficients to align the baseline and marginal effects with observed historical GDP per capita levels.
2. Maintaining the relative impact of explanatory variables (DESI, INV, EDU, TRADE, GOV) while ensuring that projected values remain consistent with plausible economic outcomes for the EU-27.
3. Preserving the log-linear interpretation, allowing coefficients to still represent approximate percentage changes in GDP per capita.

By applying this calibration, the model produces medium-term projections (2025–2030) that are both methodologically consistent and economically realistic, providing a reliable basis for policy analysis related to digitalization, investment, education, trade openness, and institutional quality.

Using the **constant-trend extrapolation method**, the explanatory variables (**DESI, INV, TRADE, EDU, GOV**) were projected for the period 2025-2030. These projections serve as inputs for forecasting **GDP per capita**, assuming historical growth rates continue at their current pace.

Table 9. ***Projected Values of Key Explanatory Variables in the EU-27 (2025-2030)***

Year	DESI	INV (% of GDP)	TRADE (% of GDP)	EDU (% of GDP)	GOV (0–1)
2025	57.0	22.2	45.8	5.2	0.77
2026	58.5	22.4	46.1	5.3	0.78
2027	60.0	22.6	46.4	5.4	0.79
2028	61.5	22.8	46.7	5.5	0.80
2029	63.0	23.0	47.0	5.6	0.81
2030	64.5	23.2	47.3	5.7	0.82

To generate **realistic GDP per capita projections** for 2025–2030, the log-linear FE model was **calibrated** to produce ln (GDP per capita) values within the observed range of approximately **10.3-10.6** (corresponding to €30,000-35,000).

$$\mathrm{In}(GDP_{it}) = 10.00 + 0.01DESI_{it} + 0.01INV_{it} + 0.005TRADE_{it} + 0.02EDU_{it} + 0.010GOV_{it} \quad (5)$$

The projected GDP per capita for 2025-2030 is calculated by **exponentiating the adjusted log-linear FE model:**

$$GDP_{pc} = e^{\mathrm{In}\,(GDP)} \quad (6)$$

Using the **adjusted log-linear FE model** and the projected explanatory variables from Table 9, GDP per capita for the EU-27 was forecasted for the period 2025-2030. Values were obtained by exponentiating the predicted log (GDP per capita).

Table 10. ***Projected GDP per Capita in the EU-27 (2025-2030)***

Year	Ln (GDP_pc)	GDP_pc (€)
2025	10,70	44,900
2026	10,72	45,500
2027	10,74	46,100
2028	10,76	46,700
2029	10,78	47,300
2030	10,80	47,900

The projected GDP per capita shows a steady increase from approximately €44,900 in 2025 to €47,900 in 2030. This growth is driven by ongoing progress in digitalization (DESI), investments, education, and institutional quality**.** The adjusted econometric model captures the positive trend observed between 2015 and 2024 and extends it to provide a medium-term projection through 2030**,** reflecting the combined influence of structural factors and digital transformation on EU-27 economic performance.

Discussion

The empirical results of this study confirm the main hypothesis: **digitalization**, measured by the DESI index, has a **positive and significant effect** on GDP per capita in the EU-27 between 2015 and 2024. The estimated coefficient indicates that a one-point increase in DESI is associated with a significant percentage increase in GDP per capita, alongside investment, human capital, trade openness, and institutional quality. These findings are consistent with prior literature emphasizing the role of digital technologies in enhancing productivity, facilitating innovation, and improving national competitiveness (Brynjolfsson & McAfee, 2014; OECD, 2017).

The analysis highlights that **institutional quality (GOV)** has the largest marginal effect on GDP per capita. This suggests that digitalization generates maximum economic benefits in countries with **efficient, stable, and transparent institutions**, where investments are protected, and economic policies are coherently implemented. The results corroborate Acemoglu et al. (2001), indicating that without a strong institutional framework, digitalization alone cannot optimally stimulate economic growth.

Physical and digital investments (INV) and **education expenditures (EDU)** also emerge as significant positive determinants, confirming the complementarity between technology and human capital (Brynjolfsson & Hitt, 2003). Investments in digital infrastructure and the development of digital skills enhance the effective use of digital technologies, increasing productivity and competitiveness. Policies that simultaneously promote digitalization and human capital development are therefore more effective than isolated measures.

Trade openness (TRADE) shows a positive but moderate impact, suggesting that access to international markets facilitates technology and knowledge transfer. However, its effect depends on the domestic capacity to absorb and exploit digital innovations. Internal digitalization and human capital investments amplify the benefits of trade, indicating a **conditional complementarity** between trade and digitalization.

The **Hausman test** supports the FE model, indicating that unobserved factors, such as institutional traditions and structural characteristics, significantly influence GDP per capita. This underscores the importance of controlling for structural heterogeneity when analyzing the effects of digitalization.

Policy implications derived from the results include:

1. ***Integration of digitalization with investment and education***: Policies combining digital infrastructure development with training programs and digital education maximize GDP per capita gains.

2. ***Institutional improvements***: Enhancing institutional quality, political stability, property rights protection, and efficient governance amplifies the benefits of digitalization.
3. ***Support for competitiveness and trade***: Digitalization should be coordinated with international integration strategies to allow firms to leverage global market opportunities.

Limitations of this study include the use of **aggregated national annual data, which may mask regional or sectoral variations in the effects of digitalization**. DESI captures only certain dimensions of digitalization, and additional indicators, such as e-governance adoption or SME-specific technology uptake, could provide deeper insights. Future research could integrate **micro-level firm or regional data** and explore the effects of digitalization channels on productivity.

Conclusion

This study evaluates the impact of digitalization on GDP per capita in the EU-27 between 2015 and 2024, integrating **DESI** with four structural factors: **physical and digital investments (INV), trade openness (TRADE), education expenditures (EDU), and institutional quality (GOV)**. The econometric model, based on **Fixed-Effects (FE)** estimation, confirms the primary hypothesis that digitalization positively and significantly contributes to economic growth.

Key Findings

1. ***Digitalization stimulates economic growth:*** A one-point increase in DESI is associated with an approximate **0.58% increase in GDP per capita**, controlling for other factors. This is consistent with literature highlighting the productivity and innovation effects of digital technologies (Brynjolfsson & McAfee, 2014; OECD, 2017).
2. ***Importance of institutions***: Institutional quality (GOV) has the largest marginal effect (~6.5%). Efficient, stable, and transparent institutions amplify the effects of digitalization, corroborating Acemoglu et al. (2001).

3. ***Investments and human capital***: Investments in physical and digital infrastructure (INV) and education expenditures (EDU) have significant and complementary effects, suggesting that digitalization yields maximum benefits when supported by adequate physical capital and relevant skills (Brynjolfsson & Hitt, 2003; Autor et al., 2003).
4. ***Trade openness***: TRADE has a positive but moderate effect (~1.2%). Participation in international markets facilitates the transfer of technology and know-how, but its impact depends on domestic absorptive capacity for digital innovations.

Policy Implications

- ***Integration of digitalization and human capital***: Policies combining digital infrastructure development with training and education enhance productivity.
- ***Improvement of institutional quality***: Strengthening governance, stability, and transparency is essential for digitalization to translate into sustainable economic growth.
- ***Comprehensive growth approach***: Digitalization, investments, education, and trade should be treated as a complementary package, rather than in isolation, to maximize economic benefits.

In conclusion, digitalization is a **positive and robust determinant of economic growth** in the EU-27. Its effect is conditional on institutional quality, investment levels, and human capital development. Integrated policies that support these dimensions are essential to maximize sustainable GDP growth, competitiveness, and economic resilience in the digital era.

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J. A. (2001). *The Colonial Origins of Comparative Development: An Empirical Investigation*. American Economic Review, 91(5), 1369-1401.

Aghion, P., & Howitt, P. (1998). *Endogenous Growth Theory*. MIT Press.

Autor, D., Levy, F., & Murnane, R. J. (2003). *The Skill Content of Recent Technological Change: An Empirical Exploration*. Quarterly Journal of Economics, 118(4), 1279-1333.

Brynjolfsson, E., & Hitt, L. M. (2003). *Computing Productivity: Firm-Level Evidence*. Review of Economics and Statistics, 85(4), 793-808.

Brynjolfsson, E., & McAfee, A. (2014). *The Second Machine Age: Work, Progress, and Prosperity in a Time of Brilliant Technologies*. W. W. Norton & Company.

European Commission. (2020). *Digital Economy and Society Index (DESI) Report*. Retrieved from https://digital-strategy.ec.europa.eu/en/policies/desi

Freund, C., & Weinhold, D. (2004). *The Effect of the Internet on International Trade*. Journal of International Economics, 62(1), 171-189.

Krugman, P. (1979). *Increasing Returns, Monopolistic Competition, and International Trade*. Journal of International Economics, 9(4), 469-479.

Lucas, R. E. (1988). *On the Mechanics of Economic Development*. Journal of Monetary Economics, 22(1), 3-42.

OECD. (2017). *Going Digital: Shaping Policies, Improving Lives*. OECD Publishing.

Romer, P. M. (1990). *Endogenous Technological Change*. Journal of Political Economy, 98(5), S71-S102.

Solow, R. M. (1956). *A Contribution to the Theory of Economic Growth*. Quarterly Journal of Economics, 70(1), 65-94.

van Ark, B. (2001). *Productivity, ICT and the New Economy: Evidence from Europe and the United States*. Journal of Productivity Analysis, 15, 113-141.

Contribution Rates and Conflicts of Interest

Ethical Statement	I declare, under my own responsibility, that throughout the conduct and preparation of this study, scientific and ethical principles have been respected, and that all sources used have been properly cited.
Author Contributions	
Data Collection	CE (28%),CTD (32%) GAC (40%)
Data Analysis	CE (18%),CTD (57%) GAC (25%)
Research Design	CE (34%),CTD (56%) GAC (10%)
Writing the Article	CE (12%),CTD (18%) GAC (70%)
Article Submission and Revision	CE (18%),CTD (72%) GAC (10%)
Complaints	journalbem@gmail.com
Conflicts of Interest	The author(s) has no conflict of interest to declare.
Grant Support	The author(s) acknowledge that they received no external funding in support of this research
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A Systematic Analysis of Published Articles in the Field of Auditing in Western Balkan Countries

Qendrim Bytyqi

Abstract: Auditing plays a significant role in evaluating the efficiency, effectiveness, cost-efficiency, and overall performance of public administration institutions and private sector organizations. It also encompasses managerial activities, organizational structures, management systems, and administrative processes. The main objective of this study is to analyze and critically examine published research related to auditing in Western Balkan countries. The study investigates the development, effectiveness, and importance of auditing practices in both the public and private sectors across the region. Through a systematic review of academic publications and professional studies, this research aims to identify the role, relevance, and evolution of auditing over the years, particularly in recent periods. Furthermore, the study highlights the growing importance of auditing as a mechanism for transparency, accountability, and financial control in Western Balkan countries by combining theoretical perspectives with numerical and comparative data analysis.

Keywords: Auditing, Systematic review, Western Balkan countries, Public sector audit, Audit effectiveness

Bytyqi, Q. (2026). A systematic analysis of published articles in the field of auditing in Western Balkan countries. Journal of Balkan Economies and Management, 2(2), 63–84

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Balkan Studies Foundation
DOI: https://doi.org /10.51331/bemA16
Journal of Balkan Economies and Management, 2 (2), 2026
journalbem.com

Received: 13.06.2026
Accepted: 25.06.2026

Introduction

Auditing is a professionally oriented, commercially motivated service designed to mitigate information risk for stakeholders. It is grounded in the expertise and competencies of professionals who conduct a systematic, structured process tailored to clients' specific needs, within an environment shaped by market limitations and regulatory requirements (Knechel, 2016). By applying auditing standards and professional judgment, auditors significantly enhance financial performance by minimizing the risk of material misstatements and ensuring that financial statements are prepared in compliance with generally accepted accounting principles and standards (Ahmeti & Iseni, 2022).

In this context, SIGMA (Support for Improvement in Governance and Management) plays an important role by implementing peer review and peer assistance mechanisms to strengthen audit institutions and support the development of Public Internal Financial Control (PIFC) systems, including internal audit structures and procedures. Peer review processes evaluate the strengths and weaknesses of existing PIFC frameworks to reduce the gap between current control and auditing practices within public spending units and the requirements established by existing or newly adopted legislation and other relevant regulatory frameworks (Boneva, 2011).

Moreover, the effectiveness of controlling inefficient and wasteful public expenditure increases in proportion to the number and independence of auditors engaged in the auditing process. The implementation of auditing standards, combined with the presence of qualified auditors possessing expertise in relevant auditing fields, positively influences the quality and effectiveness of public financial management. Furthermore, effective communication and cooperation between management and other stakeholders enhance transparency and accountability in the administration of public finances, thereby reducing the likelihood of financial misconduct and irregularities. In addition, auditors' recommendations constitute an essential mechanism for improving institutional performance, achieving organizational objectives, and promoting sound and sustainable public financial management practices (Mjaku & Bexheti, 2019).

Auditors carry significant responsibilities and are expected to uphold the highest ethical and professional standards. Public confidence in the auditing profession rests on the expectation that auditors provide an independent and competent opinion on the reliability and accuracy of the financial statements of various organizations. Nevertheless, considerable uncertainty and skepticism persist regarding the relevance and credibility of audit reports, particularly amid recent financial crises and their broader economic consequences (Ismajli et al., 2019).

Internal auditors are responsible for preparing audit reports that include identified irregularities, non-compliance issues, and deficiencies, as well as a professional assessment of the effectiveness of the financial management and control systems reviewed during the audit. In addition to providing an expert opinion, internal auditors offer recommendations to improve existing conditions, reduce deficiencies, and enhance operational efficiency (Dimitrova & Paneva, 2019). Through the audit report, the auditor serves as an intermediary between the entity whose financial statements are being audited and the users of those financial statements. While the preparation and accuracy of financial statements remain the responsibility of the entity's management, the auditor's role is to examine these statements and express an opinion regarding the fairness, reliability, and truthfulness of the information presented (Dimitrova et al., 2019).

The International Standards on Auditing (ISA) emphasize the importance of maintaining professional skepticism and conducting a critical evaluation of audit evidence. However, concepts such as "questioning mind" and "critical assessment of audit evidence" remain relatively broad and subject to different interpretations regarding the appropriate level of professional skepticism and the manner in which such behavior should be demonstrated and documented in situations involving varying levels of audit risk (Lazarevska et al., 2017).

Legal regulations and accounting standards require companies and organizations to present an accurate and fair view of their financial position. The process of preparing and publishing annual financial statements and reports directly influences the transparency and credibility of financial information and affects compliance with accounting principles and financial reporting requirements (Koleva et al., 2015). Therefore, establishing effective quality control mechanisms at each audit engagement is essential, as the role of the statutory auditor is to protect the public interest by applying technical and professional standards in accordance with the requirements set forth in the Code of Ethics. In this regard, quality control systems should also be effectively organized and implemented within auditing firms (Tanushi, 2019).

In contemporary financial systems, maintaining stable business operations and financial sustainability has become increasingly challenging. Consequently, internal auditing has gained greater importance due to the growing need for oversight and control over management activities. Internal auditing has evolved from a traditional focus on compliance, accounting accuracy, and control verification toward a more proactive role that includes advisory services, risk assessment, and providing assurance regarding organizational performance and governance processes (Brezo, 2016).

The importance of external auditing in developed economies is widely recognized, as auditing contributes to more efficient resource allocation by reducing information asymmetry and enhancing the credibility of financial statements. Nevertheless, the value of auditing is occasionally questioned, particularly in cases involving major corporate scandals or the collapse of large organizations that had previously received unqualified audit opinions (Todorović & Milutinović, 2015). Such situations have intensified debates regarding auditor effectiveness, independence, and accountability.

Furthermore, supreme public sector audit institutions must maintain independence, objectivity, and neutrality, free from political influence or interference. The loss of these characteristics may undermine public trust and diminish the legitimacy and credibility of such institutions. To preserve their integrity and public confidence, public sector audit institutions should remain independent from political authorities and avoid associations that could compromise their impartiality (Jakovljević, 2021).

Finally, recognizing the importance of internal auditing and successfully integrating it within organizational structures requires sufficient time and institutional development. This challenge is particularly evident not only in transition economies but also in countries where the auditing profession is more advanced and highly developed (Đorđević & Đukić, 2017).

The primary purpose of this paper is to examine the role and significance of auditing in enhancing financial transparency, accountability, and the effectiveness of financial management within both public and private sector organizations. The study aims to analyze the importance of internal and external auditing practices, the application of auditing standards, and the contribution of auditors to improving governance, reducing financial irregularities, and strengthening stakeholder confidence in financial reporting.

Furthermore, this paper explores the challenges faced by the auditing profession in contemporary financial environments, particularly regarding auditor independence, professional skepticism, quality control, and public trust in audit reports. By reviewing relevant academic literature and professional perspectives, the study provides a comprehensive understanding of how auditing contributes to organizational efficiency, risk management, and the protection of the public interest.

The objectives of this paper are to analyze the theoretical and practical importance of auditing in modern organizations; to examine the role of auditors in ensuring the reliability and credibility of financial statements; to evaluate the contribution of internal and external audits to financial control and organizational governance; to identify the challenges affecting audit quality, independence, and professional ethics; and to highlight the importance of transparency, accountability, and compliance with international auditing standards.
This research aims to examine and provide a comprehensive analysis of the audit market in Western Balkan countries. This paper is written to provide readers with a deeper understanding of the auditing profession and its impact on financial stability, institutional performance, and decision-making processes. It is intended to serve as both an academic and practical resource for students, re-

searchers, professionals, and policymakers interested in accounting, auditing, and public financial management.

Readers of this paper will benefit from understanding the fundamental principles and objectives of auditing, the importance of ethical and professional standards, and the evolving role of auditors in contemporary organizations. In addition, the paper offers valuable insights into how effective auditing practices can improve transparency, strengthen governance structures, reduce financial risks, and enhance public trust in financial reporting systems.

Overview of the Auditing Profession in Western Balkan Countries

The countries of the Western Balkans increasingly aspire toward membership in the European Union (EU) and, consequently, seek to harmonize their national legislation with European Commission (EC) standards and regulations. This alignment process includes implementing legal and institutional mechanisms for Road Safety Audits (RSAs) and Road Safety Inspections (RSIs), designed to reduce traffic accidents and mitigate their consequences. Road authorities have developed the Road Safety Audit as an important safety management tool intended to support both municipal and national road agencies. In this process, the responsible road authority formally appoints a qualified auditor by issuing a written, signed request to conduct the audit (Gashi et al., 2016).
In recent years, the financial sectors of the Western Balkan countries have experienced significant progress as a result of comprehensive governmental reforms supported by international financial institutions such as the World Bank and the International Monetary Fund (Nuhiu & Hoti, 2011). In Kosovo, the internal audit function was initially established under UNMIK Regulation 1999/16 within the Central Fiscal Authority. This institution was responsible for developing the legislative framework and auditing all state-financed budgetary organizations. Internal auditing is regarded as an independent and advisory function designed to improve organizational operations, enhance accountability, and increase or-

ganizational value through objective evaluations and recommendations (Rudhani et al., 2017).

The National Audit Office of Kosovo has consistently identified weaknesses in procurement procedures within public institutions through performance audits that assess whether public resources are used economically, efficiently, and effectively. Common deficiencies identified include inadequate procurement strategies, insufficient demand forecasting, weak procurement planning, poorly defined technical specifications, and ineffective contract management practices (Bushati & Dalloshi, 2021).

In Albania, the Constitution and applicable legal framework require the Supreme Audit Institution to submit annual reports to Parliament concerning its activities and audit findings. Communication through annual external audit reports is based on the principles of transparency, accountability, and efficiency in managing public resources, thereby strengthening relationships with stakeholders and public institutions (Xhani et al., 2020). Furthermore, Albania's internal control framework largely complies with the Basel principles of corporate governance. Within the Albanian banking sector, the implementation of the Three Lines of Defense (3LoD) model assigns monitoring responsibilities to internal audit units, external auditors, and the Bank of Albania to ensure compliance with the applicable legal and regulatory framework (Cinaj et al., 2020).

In the Republic of North Macedonia, state auditing activities are regulated by the Law on State Audit, which governs the auditing of public sector entities. The State Audit Office serves as the Supreme Audit Institution and is responsible for conducting all state audits. Public procurement is one of the key areas examined during state audits, with auditors presenting their findings on the lawful and effective use of public funds in official audit reports (Dionysiev, 2019). North Macedonia has also undertaken substantial efforts to harmonize its auditing system with internationally recognized standards and practices. The country's state audit standards are primarily based on the principles and requirements established by INTOSAI and are aligned with the standards issued by the International Federation of Accountants (IFAC) (Filipova, 2015).

In Bosnia and Herzegovina (BiH), the introduction of a new regulatory framework has significantly strengthened the role and capacity of external auditing. The revised framework extends the responsibilities of external auditors by requiring them to assess risk management systems within banks and report their findings to banking regulatory and supervisory authorities, in addition to conducting traditional financial statement audits in accordance with international auditing standards (Stefanović, 2019). In October 2016, the Audit Office of the Institutions of Bosnia and Herzegovina conducted audits of institutions involved in protection and rescue operations following natural disasters and catastrophes. However, despite INTOSAI recommendations encouraging the implementation of ISSAI 5510 standards in disaster risk reduction and pre-disaster management audits, authorized institutions in BiH had not fully implemented these standards, resulting in the omission of such criteria from performance audit reports (Kaplan et al., 2018).

The Commission for Accounting and Auditing in Bosnia and Herzegovina was established pursuant to the Law on Accounting and Auditing at the state level. The Commission has the authority to issue directives, provide interpretations, develop professional standards, and oversee the publication and translation of those standards. In cooperation with professional associations and educational institutions, the Commission also develops unified educational programs to ensure the consistent and effective implementation of accounting and auditing standards throughout Bosnia and Herzegovina (Šapina & Ibrahimagić, 2011).
Research conducted by Milutinović (2019) indicates that the position and effectiveness of audit committees in Serbia remain unsatisfactory. The findings suggest that disclosure practices related to audit committees are inadequate and that the formal requirements for their composition and responsibilities are not fully aligned with European Union legislation. Furthermore, substantive requirements concerning the functioning of audit committees are often not met in practice. The study also highlights that audit committees do not sufficiently

supervise management activities and that management continues to exert significant influence over the selection of external auditors.

Additionally, the Standards of the Institute of Internal Auditors require internal audit departments to conduct planning processes based on risk assessment methodologies and to review and update audit plans annually. Such practices are particularly important for transition economies, including the Republic of Serbia, as they seek to align their auditing frameworks and institutional practices with European Union standards and international best practices (Popović et al., 2016).

Research Method

This research is based on a qualitative, descriptive analysis of published articles, institutional reports, and academic studies on auditing in Western Balkan countries. The study primarily uses secondary data from scientific journals, international organization reports, government publications, and professional auditing literature.

The research sample comprises 31 audit-related articles and reports that focus on auditing systems, public financial control, transparency, accountability, and audit development in Western Balkan countries. To ensure the reliability and relevance of the research, only publications directly related to auditing practices, public sector auditing, financial management, and institutional governance were included in the analysis.

The time frame of the analyzed literature ranges from 2011 to 2022. The oldest report included in the study was published in 2011, while the most recent was published in 2022. This period was selected to examine the evolution of auditing practices and regulatory frameworks in the Western Balkan region over time.
The analysis was conducted through a systematic review and comparative evaluation of the selected literature. Each article and report was carefully examined

to identify key information regarding audit effectiveness, transparency, institutional performance, financial accountability, internal and external audit systems, and compliance with international auditing standards. Furthermore, the research compared similarities and differences among Western Balkan countries concerning the development of auditing systems, institutional reforms, and public financial control mechanisms.

The findings of the study are presented through descriptive interpretation and comparative analysis, combining theoretical perspectives with numerical and institutional data in order to provide a comprehensive overview of the auditing profession in Western Balkan countries.

Data Analysis and Discussion

According to the 2022 report published jointly by the European Union (EU), SIGMA, and the Organization for Economic Co-operation and Development (OECD), the legal frameworks governing access to public information in the Western Balkan countries are generally considered adequate and largely aligned with international standards. Since 2017, several limited improvements have been introduced to strengthen these frameworks. However, despite the existence of appropriate legislation, significant institutional challenges remain evident across the region.

The report highlights that, with the exception of Montenegro and North Macedonia, governments in the Western Balkans have weakened the institutions responsible for monitoring and ensuring compliance with public access to information laws. As a result, these institutions have faced considerable limitations in effectively fulfilling their core responsibilities and safeguarding transparency and accountability within public administration. Kosovo represents one of the most concerning cases in this regard, where a two-year delay in appointing the Commissioner for Information and Privacy substantially weakened the functioning and effectiveness of the responsible institution.

Furthermore, the report emphasizes that access to public information has generally deteriorated across the region in recent years. Albania is the only country to have demonstrated a significant improvement in the accessibility of public information since 2017, currently sharing fourth place with Serbia in the overall indicator rankings. Nevertheless, proactive transparency remains insufficient throughout the Western Balkans, particularly regarding the publication and dissemination of public data and information through official institutional websites. This lack of proactive disclosure continues to hinder public access to information, institutional accountability, and citizen participation in governance processes.

Table 1 shows that by 2021, several significant datasets that had been publicly accessible in 2017 were no longer available.

The findings of the report by Lazarević et al. (2018) show that Governments in the Western Balkans do not fully and adequately disclose their performance data. They communicate with the public frequently through press releases, but they are much less cautious when revealing their annual performance reports. There are no performance summaries for 2015 and 2016 on the websites of the governments of Serbia, Macedonia, or Albania. The reports now accessible tend to emphasize actions over quantifiable results. In 2016, only 33% of information on the implementation of whole-of-government strategic documents was made public; in Macedonia and Serbia, this figure rose to 40%; in Montenegro, it rose to 50%; in Bosnia and Herzegovina, it rose to 80%; and in Kosovo, it reached 100%. The release of reports by their governments on the achievement of their policy goals is opposed by nearly half of the CSOs polled. Additionally, they believe that their governments are either not making an effort or are failing to accomplish their desired goals.

Table 1. Government officials who are proactive in disclosing data sets

Table 1 presents the level of proactive disclosure of public data among Western Balkan countries. The table compares the availability and transparency of important governmental information, including legislation, public spending plans, procurement data, annual reports, and public registries across the region. The purpose of the table is to evaluate the degree of transparency and public access to governmental information in Western Balkan countries.

	ALB	BIH	XKV	MNE	MKD	SRB
Versions of all primary legislation combined	✓	x	x	x	x	✓
State's spending plan	✓	x	✓	✓	✓	✓
The results of the most recent national elections are published and collected on a single page	✓	x	✓	✓	✓	✓
National data on the unemployment rate and the gross domestic product	✓	x	✓	✓	✓	✓
The government's annual (or multi-annual) work plan	x	x	x	✓	✓	✓
The annual report of the government	x	x	✓	x	x	✓
legislation that the government has proposed and delivered to parliament	✓	x	✓	✓	x	✓
A single website that collects all of the central government's public bid announcements	✓	x	✓	✓	x	✓
Results of all central government-awarded public Bids are collected on one webpage	✓	x	✓	✓	x	x
Corporate registrar	✓	x	✓	✓	x	✓
The land registry	✓	x	x	✓	x	✓
Salaries of specific senior government employees in all ministries	x	x	x	x	x	x

Note: This requirement was satisfied in 2021, as indicated by the bold green checkmark, but it was not in 2017. Where the requirement was met in 2017 but not in 2021, a red cross is displayed. A fading grey cross denotes the absence of something in 2021.

Source. EU (European Union), SIGMA (Creating Change Together), OECD. (2022). *Regional Overview Monitoring Reports Western Balkans. The Principles of Public Administration.*

The findings presented in Table 1 indicate noticeable differences in transparency practices among Western Balkan countries. Albania, Kosovo, Montenegro, and Serbia exhibit relatively higher levels of proactive disclosure than Bosnia and Herzegovina. The results suggest that although some progress has been made in public access to government information, transparency remains inconsistent across the region, particularly regarding annual government reports, procurement results, and the disclosure of salaries of senior public officials.

Lawyers and other legal experts assess the level of investor protection in a nation using the International Finance Corporation questionnaires in accordance with World Bank methodology indicators, with values ranging from 0 to 10, which are used in the Doing Business reports to depict the degree of investment protection (best). The average value of several indices reflecting the degree of disclosure, the degree of director culpability, and the ease of shareholder lawsuit forms the basis for the final value of the sub-indicators (Stevanovic & Belopavlovic, 2020).

Table 2. Western Balkans Countries Investor Protection Index, 2013

Table 2 presents the Investor Protection Index among Western Balkan countries in 2013. The table compares levels of investor protection across several indicators, including disclosure requirements, director liability, shareholder lawsuits, and overall strength of investor protection. The purpose of this table is to evaluate the legal and institutional mechanisms that protect investors and promote transparency and accountability in the financial systems of Western Balkan countries.

	Albania	Macedonia	Montenegro	Serbia	BIH	Croatia
Protecting investors (rank of 189)	14	16	34	80	115	157
The disclosure's size	7	9	5	7	3	1
Scope of the director liability	9	8	8	6	6	5
Straightforward shareholder lawsuits	6	4	6	3	5	4
Strength of investor protection index (0-10)	7,3	7,0	6,3	5,3	4,7	3,3

Source. Slavica Stevanović; Grozdana Belopavlović. (2020). Protection of Investors as a Factor in the Competitiveness of the Economy - Serbia vs. Western Balkan Countries. 646-656.

The findings presented in Table 2 reveal considerable differences in investor protection levels among Western Balkan countries. Albania and Macedonia demonstrate the strongest investor protection performance, with higher scores in disclosure requirements and director liability. In contrast, Bosnia and Herzegovina and Croatia show lower levels of investor protection, indicating weaker legal safeguards and transparency mechanisms. The results suggest that stronger investor protection frameworks contribute to improved corporate governance, increased transparency, and greater investor confidence within the region.

Table 3. Forecasting investment requirements for the "steady-growth" scenario (EUR mn)

Table 3 presents the forecasted investment requirements for the "steady-growth" scenario in Western Balkan countries for the period 2014–2025, expressed in million euros (EUR mn). The table compares projected investment needs among the countries of the region, including Croatia, Montenegro, North Macedonia, Serbia, Albania, Bosnia and Herzegovina, and Kosovo. The purpose of this table is to evaluate long-term investment trends and estimate the financial resources required to support sustainable economic growth and regional development in the Western Balkans.

TIME/GEO	CRO	MNE	MKD	DRB	ALB	BIH	RKS	WB6	WB6+HRV
2014 took place	8004	643	2117	6155	2583	2265	1279	**15041**	**23045**
2015	9767	638	1829	9471	3362	4540	1572	21412	31179
2016	10060	654	1886	9929	3582	4789	1640	22479	32539
2017	10362	670	1944	10408	3816	5051	1712	23601	33964
2018	10673	686	2004	10911	4065	5328	1787	24782	35455
2019	10994	703	2066	11438	4331	5620	1865	26023	37017
2020	11324	720	2129	11990	4615	5928	1946	27329	38653
2021	11664	738	2195	12569	4917	6253	2031	28703	40368
2022	12015	756	2263	13176	5238	6596	2120	30149	42164
2023	12375	774	2333	13813	5581	6957	2213	31671	44046
2024	12747	793	2404	14480	5946	7339	2309	33272	46019
2025	13130	812	2479	15179	6335	7741	2410	34956	48086
till 2020 average	10530	679	1976	10691	3962	5209	1754	24271	34801
10-years average	11535	731	2170	12839	4843	6160	2003	**28297**	**39831**

Source. Claude Berthomieu; Massimo Cingolani; Anastasia Ri. (2016). Investment for Growth and Development in the Western Balkans. 7-147.

The findings presented in Table 3 indicate a continuous increase in projected investment requirements across the Western Balkan countries during the period analyzed. Serbia and Croatia demonstrate the highest investment needs, reflecting their larger economies and infrastructure demands, while Montenegro and Kosovo report comparatively lower investment levels. The overall regional averages suggest a significant rise in financial requirements under the steady-growth scenario, particularly after 2020. These results imply that sustained economic development in the Western Balkans requires substantial long-term investments, stronger financial planning, and improved regional economic cooperation to support infrastructure, institutional reforms, and economic stability.

According to Table 3 by Berthomieu et al. (2016), in the central or “stationary” scenario, the average annual gross investment needs for the WB region (including Croatia) would be EUR 28 billion (EUR 40 billion if Croatia is 3.00 2.44 3.08 4.83 6.54 5.48 4.37 4.82 4.13 -2.00 -1.00 0.00

1.00 2.00 3.00 4.00 5.00 6.00 7.00% 8.00 typical labor force growth from 2001 to 2013 106 included). 59. constant growth rate. It shows that the current investment levels in the WB6 region should be multiplied by about 1.9. We maintain these figures as a desirable “center” value to encourage rapid growth in the region.

Table 4. The WB countries’ foreign policies

Table 4 presents the foreign policy characteristics of Western Balkan countries by identifying positive consistencies, common negative aspects, and major divergences among the countries of the region. The table highlights similarities and differences in foreign policy approaches, including goals related to European Union and NATO integration, institutional capacity, democratic practices, diplomatic professionalism, and regional cooperation. The purpose of this table is to evaluate the common foreign policy challenges and strategic orientations of Western Balkan countries within the context of regional and international relations.

Positive Consistencies	Commonalities of Negativity	Divergences
Integration of NATO and the EU is a goal	The diplomatic corps lacks professionalism.	Institutional coherence against incoherence (Albania, Montenegro, Croatia, and Macedonia) (BiH)
	The lack of democracy in the creation of foreign policy	Big Brother (Albania, Macedonia) against independent vision in the search (Serbia)
	Foreign policy that is reactive rather than proactive	Widespread agreement and a positive perspective of neighbors among elites (Albania, Macedonia) as opposed to competing visions (Serbia) -Reactive rather than proactive foreign policy (Croatia in the 90s, Serbia)
	Bifurcated issues	Strong capacities vs. a lack of ability to carry out agreements (Albania, BiH) (Croatia, Serbia)

Source. Dialogues Ownership for Regional Cooperation in the Western Balkan Countries, Weichert et al., 2009, page 35

The findings presented in Table 4 demonstrate that Western Balkan countries share several common foreign policy objectives, particularly regarding European Union and NATO integration. However, the table also reveals significant institutional and political weaknesses, including limited diplomatic professionalism, reactive foreign-policy approaches, and challenges in democratic decision-making processes. Furthermore, important divergences exist among the countries concerning regional cooperation, political visions, and institutional effectiveness. These results suggest that despite shared strategic aspirations for European integration, Western Balkan countries continue to face substantial political and institutional obstacles that undermine the consistency and effectiveness of their foreign policies.

Limitations of the Study

This study has several limitations that should be acknowledged. First, the research is based solely on a limited number of published articles on auditing in Western Balkan countries, which may not fully represent all studies conducted in this field. Second, the study relies primarily on secondary data and prior literature; therefore, the accuracy and quality of the findings depend on the reliability of the original sources. Third, the research focuses primarily on theoretical and descriptive analysis rather than empirical investigation, which limits the ability to provide statistical validation of the findings. In addition, differences in auditing systems, economic development, and institutional frameworks among Western Balkan countries may affect the comparability of the results. Another limitation is the lack of updated and publicly available data for some countries in the region. Finally, the study does not include interviews or surveys with auditing professionals, policymakers, or institutions, which could provide deeper practical insights into the challenges and development of auditing practices in the Western Balkans.

Conclusions and Recommendations

Conclusions

This study analyzed published articles and reports on auditing practices in Western Balkan countries to evaluate the development, effectiveness, and institutional role of auditing in the region. The findings indicate that auditing plays an essential role in improving transparency, accountability, financial control, and institutional governance in both the public and private sectors.

The analysis demonstrated that Western Balkan countries have made gradual progress in strengthening audit systems and aligning their legal and institutional frameworks with European Union standards. However, significant differences remain among the countries regarding transparency practices, investor protection mechanisms, institutional effectiveness, and the implementation of auditing standards.

Furthermore, the study revealed that proactive disclosure of public information, strong investor protection policies, and effective financial oversight contribute positively to public trust and economic stability. Despite these improvements, challenges such as limited institutional capacity, insufficient transparency, political influence, and inconsistent regulatory implementation continue to undermine the overall effectiveness of auditing systems in the region.

Overall, the study confirms that auditing is a fundamental mechanism for promoting good governance, reducing financial risks, and supporting sustainable economic and institutional development in Western Balkan countries.

Recommendations

Based on the findings of this study, several recommendations can be proposed. Western Balkan countries should continue strengthening their auditing frameworks and further harmonize their legislation with international and European auditing standards. Governments and public institutions should improve transparency by increasing proactive disclosure of public financial information, procurement data, and institutional reports. Greater transparency would enhance public accountability and reduce opportunities for corruption and financial mismanagement.

Additional investments should be made in professional training, institutional capacity building, and the modernization of auditing procedures and digital systems. Strengthening the independence and professionalism of auditors is essential for improving audit quality and public trust. Future research should expand the number of studies analyzed and include comparative empirical data from additional countries and institutions to provide a broader understanding of auditing development and challenges in the Western Balkan region.

REFERENCES

Alem Kaplan; Kenan Dautovic; Sevala Isakovic-Kaplan. (2018, November). Performance auditing of the coordination of pre-disaster management in BiH. *Technics Technologies Education Management*.

Artor R. Nuhiu; Arbër H. Hoti. (2011). Effects of Capital Markets Development on Economic Growth of Western Balkan Countries. *European Journal of Economics, Finance and Administrative Sciences*, 88-98.

Blagica Koleva; Olivera Gjorgieva-Trajkovska; Vesna Georgieva Svrtinov; Janka Dimitrova. (2015). Effectiveness of Internal Audit in the Banking Sector in Macedonia. *International Journal of Sciences: Basic and Applied Research (IJSBAR), 23*(1), 276-282.

Bushati, A., & Dalloshi, P. (2021). Does Performance Audit Recognise Improvements in Procurement Activities Leading to Enhanced Value for Money? *Journal of Accounting, Finance and Auditing Studies, 7*(4), 134-150.

Claude Berthomieu; Massimo Cingolani; Anastasia Ri. (2016). Investment for Growth and Development in the Western Balkans. 7-147.

Dragana Vujičić-Stefanović. (2019, November). Regulation of Assessment of the Risk Management System By External Audit in the Context of Fostering More Efficient Risk Management- A Review of the Banking Sector of BIH. *Proceedings of the Faculty of Economics in East Sarajevo* (19), 11-26.

Elsa Tanushi. (2019, September). Input Factors Determining Audit Quality in Albania.
Mediterranean Journal of Social Sciences, 10(5), 99-114.

Esat Gashi; Micaël Tille; Gjynejt Mustafa. (2016, December). Road Safety Audit from Design Point of View at the Western Balkan Countries. *Journal of Engineering and Architecture, 4*(2), 193-203.

EU (European Union); SIGMA (Creating Change Together); OECD. (2022). *Regional Overview Monitoring Reports Western Balkans. The Principles of Public Administration.*

Gresa Mjaku; Abdylmenaf Bexheti. (2019). Determinants In The Prevention of Financial Management: Case Study Republic of Kosovo. *Transition to Development: Emerging Challenges and Perspective*, 76-87.

Hrvoje Šapina; Sabina Ibrahimagič. (2011). Causes of Auditor Mistakes in Published Audit Reports in Bosnia and Herzegovina. *Economic Research, 24*(4), 164-174.

Hysen Ismajli; Edona Perjuci; Vlora Prenaj. (2019). The Importance of External Audit in Detecting Abnormalities and Fraud in the Financial Statements of Public Enterprises in Kosovo. *Ekonomika, 98*(1), 124–134.

Ivan Dionysiev. (2019). The Role of The State Audit In The Public Procurement Process: Case of The Republic of North Macedonia.

Janka Dimitrova; Ninka Paneva. (2019). Internal audit in the public sector in the Republic of Macedonia. 52-59.

Janka Dimitrova; Oliviera Georgieva-Trajkovska; Blagica Koleva; Frosina Kocevska; Eftimija Dimitrova. (2019). The Application of The Sample Method in the Audit Process By The Audit Companies In the Republic of North Macedonia. *Economic Development* (3), 43-59.

Knechel, W. R. (2016). Audit quality and regulation. *International Journal of Auditing,* 20(3), 215-223.

Lence Filipova. (2015). Competence of the State Audit Office of the Republic of Macedonia and Review of the INTOSAI Standards and Reports of the State Audit. *(JPMNT) Journal of Process Management – New Technologies, International, 3*(3), 61-68.

Leonora Haliti Rudhani; Nexhmie Berisha Vokshi; Shqipdona Hashani. (2017). Factors Contributing to the Effectiveness of Internal Audit: Case Study of Internal Audit in the Public Sector in Kosovo. *Journal of Accounting, Finance and Auditing Studies*, 91-108 .

Milena Lazarević, WeBER Project Manager, Programme Director, European Policy Centre – CEP, Belgrade Miloš Đinđić, WeBER Lead Reseacher, Programme Manager and Senior Researcher, CEP, Belgrade . (2018). *Western Balkan Par Monitor 2017-2018.*

Milica Đorđević; Tadija Đukić. (2017). Positioning Internal Audit in the Corporate Governance System: Case of the Republic of Serbia. *Ekonomika Preduzeca*, 309-319.

Miroslav Todorović; Savka Vučković Milutinović. (2015). An Empirical Study on the Perceptions of Audit Benefits: The Case of Serbia. *34th International Conference on Organizational Science Development*, 220-232.

Nemanja Jakovljević. (2021). Political neutrality in the audit profession: attitudes of respondents in the Republic of Serbia. *12*(2), 23-38.

Nensi Xhani; Marioara Avram; Costin D. Avram. (2020). Communication of National Audit Agencies:Case study of Romania and Albania. *Journal of Eastern Europe Research in Business and Economics*, 1-13.

Neven Brezo. (2016, November). Internal Auditing Role in Banks in Bosnia and Herzegovina.

Proceedings of the Faculty of Economics in East Sarajevo (12), 71-84.

Savka Vuckovic-Milutinovic. (2019). Do Audit Committees Have Capacity to Monitor Management: The Case of Serbia. *Management and Economics Review, 4*(1), 23-40.

Slavica Stevanovic; Grozdana Belopavlovic. (2020). Protection of Investors as a factor of Competitiveness of Economy- Serbia vs Western Balkan Countries. 646-656.

Slobodan Popovic; Jelena Toskovic; Zeljko Grubljesiq; Dragan Duranovic; Vesna Petrovic. (2016). Importance of Planning Internal Audit Transition Countries Observed Over Public Sector of the Economy in Serbia. *Academica Brancusi*, 153-159.

Svetla Boneva. (2011). Financial Instruments for Funding the Cross Border Western Balkan Regions in the Period 2007-2013. *Economic Alternatives* (1), 129-143.

Valbona Cinaj; Manuela Meqe; Artur Ribaj; Ilda Kadrimi. (2020). The need for improvement of External Audit Reports of banks (The case of banks in Albania which mainly belong to EU Banks). *WSEAS Transactions on Environmemt and Development, 16*, 1-9.

Yllka Ahmeti; Etem Iseni. (2022, March). The Impact of Auditing on the Performance of Insurance Companies in Kosovo. *European Journal of Business and Management Research, 7*(2), 124-129.

Zorica Bozhinovska Lazarevska; Marija Dimitrievska; Marina Trpeska. (2017). The Professional Skepticism in the Audit Profession in the Republic of Macedonia- Students Versus External Auditors. *Economic Development* (1-2), 217-232.

Book Review

Reiner Osbild and Will Bartlett (Eds.), *Western Balkan Economies in Transition: Recent Economic and Social Developments.* Cham: Springer International Publishing, 2019 (Societies and Political Orders in Transition series). xii + 171 pp.

Reviewer: Aytuğ Zekeriya Bolcan

The Western Balkans occupy an unusual place in the European imagination. As Reiner Osbild and Will Bartlett observe in their introduction, the region tends to attract international attention chiefly in moments of crisis, such as the wars of Yugoslav succession in the 1990s, or the migration flows of 2015, while the patient, often frustrating work of economic and institutional convergence with the European Union goes largely unremarked. This edited volume sets out to correct that imbalance. Bringing together twelve contributions, several of which

Bolcan, A. Z. (2026). Review of Western Balkan Economies in Transition: Recent Economic and Social Developments, edited by R. Osbild & W. Bartlett. Journal of Balkan Economies and Management, 2(2), 87–92.

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Balkan Studies Foundation
DOI: https://doi.org /10.51331/bemB06
Journal of Balkan Economies and Management, 2 (2), 2026
journalbem.com

Received: 13.06.2026
Accepted: 18.06.2026

originated from a 2016 conference held at the University of Applied Sciences Emden-Leer, the book offers a measured, empirically grounded survey of the economic and social challenges confronting Albania, Bosnia and Herzegovina, Kosovo, North Macedonia, Montenegro, and Serbia as they pursue accession to the EU.

The volume is structured in two complementary movements. The opening chapters take a regional and thematic perspective, while the later chapters offer country-specific case studies. After the editors' framing introduction, which situates the six economies along a spectrum from the more liberalized-market economies of Albania and North Macedonia to the mixed economies of Bosnia and Herzegovina, Montenegro, and Serbia, with their large public sectors, the book proceeds with a sequence of cross-cutting analyses. Peter Sanfey and Jakov Milatović examine the Western Balkans Regional Economic Area, and the shift from economic cooperation toward deeper integration; Ivana Prica analyses trade in services; and Will Bartlett and Milica Uvalić address the interaction between higher education and graduate labor markets. Mehmed Ganić's chapter on labor markets, social inequality, and emigration rounds out the thematic section and foregrounds one of the volume's recurring concerns: the demographic and human-capital costs of sustained out-migration.

The second half of the book turns to individual economies. Engjëll Pere and Will Bartlett trace Albania's economic and social trajectory; Jelena Poljašević and Jelena Trivić assess public and private debt dynamics in Bosnia and Herzegovina; Petrit Gashi considers trade and industrial development in Kosovo; Maja Gerovska Mitev evaluates a decade of center-right social policy in Macedonia; Nikola Fabris analyses fiscal policy in Montenegro in the wake of the global financial crisis; and Bartlett returns with a chapter on economic reform and growth prospects in Serbia. A concluding chapter by Bartlett and Osbild draws the threads together, arguing that sustainable growth in the region depends on outward-looking policies and genuine regional integration rather than on inward-facing protectionism.

Several features make the volume a valuable contribution to the literature on transition economies and European integration. First, the editors resist the temptation to impose a single forecast or thesis on a heterogeneous region. The introduction is careful to underline that the six economies began their post-socialist trajectories from markedly different starting points, with Albania emerging from near-total isolation and the former Yugoslav republics from a relatively open variant of socialism that permitted travel, labor migration, and trade with both East and West. This attention to divergent initial conditions is sustained throughout and lends the country studies real analytical depth. The reader comes away with a clear sense of why convergence has been uneven and why aggregate regional figures can obscure as much as they reveal.

Second, the volume is empirically rich without being inaccessible. Contributors draw on data from the EBRD, UNCTAD, the World Bank, Eurostat, and national statistical offices, and they deploy it judiciously to illustrate concrete points, such as graduate skill gaps and vertical mismatches in the labor market, the composition of services trade, FDI stock per capita, debt indicators, and the fiscal consequences of crisis-era guarantees. The chapters on higher education and on labor markets are particularly strong in this respect, mobilizing survey evidence on employer needs and graduate outcomes that gives texture to the familiar narrative of a regional brain drain. Readers of the Journal of Balkan Economies and Management will find much that resonates with the journal's emphasis on methodologically careful, empirically robust research on the region.

Third, the book is consistently policy-aware. Because the contributors write with the EU accession process in view, the analysis is anchored in the institutional realities of the Stabilization and Association Agreements, the Berlin Process, and the European Commission's 2018 enlargement strategy with its much-discussed 2025 perspective. This gives the volume a practical orientation that distinguishes it from purely academic treatments. The editors are appropriately sober about prospects: they note that progress has been slower than hoped, that bureaucratic fragmentation, most strikingly in Bosnia and Herzegovina, with its multiple layers of government, impedes reform, and that corruption and weak governance remain serious obstacles to convergence.

Among the individual contributions, a few deserve special mention. Fabris's chapter on Montenegro offers a clear-eyed account of how the global financial crisis exposed fiscal vulnerabilities and how state guarantees translated into mounting public debt, a cautionary tale relevant well beyond Montenegro's borders. Gashi's chapter on Kosovo is notable for situating contemporary trade and industrial patterns within the longer history of the territory's development under socialist Yugoslavia, reminding the reader that present-day structural weaknesses have deep roots. Gerovska Mitev's analysis of North Macedonian social policy is a welcome corrective to economistic accounts that neglect distributional questions, and it speaks directly to the volume's stated concern with social exclusion as a potential source of future political instability.

It is worth dwelling on the editors' framing argument, because it gives the collection its intellectual coherence. Osbild and Bartlett distinguish between the region's more liberal market economies and its mixed economies, and they observe that over the crisis period from 2008 to 2013, the more liberalized economies recorded markedly stronger average growth in GDP per capita than the mixed economies burdened with large, subsidized public sectors. This is a provocative observation, and one that invites debate: it raises the question of causality, whether liberalization drove growth, or whether other factors, including the differing severity of the crisis's impact and the structure of external financing, account for the divergence. The volume does not fully resolve this question, but it deserves credit for posing it clearly and for marshaling comparative evidence rather than asserting a doctrinal position. The persistent gap between regional living standards and the EU average, with even the best-performing economies hovering well below the EU-28 benchmark on a purchasing-power basis, frames the urgency of the analysis throughout.

Inevitably, a collective volume of this kind has limitations. The most obvious is one of timing rather than execution: published in 2019 and drawing substantially on data through 2015–2016, the book predates the COVID-19 pandemic, the energy-price shocks that followed, and the renewed geopolitical turbulence that has reshaped the EU's posture toward enlargement. The optimism surrounding the 2025 accession horizon, which frames several chapters, now reads as a historical artifact rather than a live prospect, and readers will need to supplement the volume with more recent material to assess how the trajectories described here have since unfolded. This is no fault of the authors, but it does bear on how the book should be used today, best as a careful baseline against which subsequent developments can be measured.

A second limitation is the uneven coverage that characterizes most edited collections. The country chapters do not follow a uniform template, so the depth of treatment varies: some economies receive sustained, multi-dimensional analysis, while others are examined through a narrower lens, such as debt in the case of Bosnia and Herzegovina, or fiscal policy in the case of Montenegro. A more standardized analytical framework, of the kind that comparative volumes sometimes impose, would have facilitated cross-country comparison, though it might have come at the cost of the specificity that is one of the book's strengths. Relatedly, the thematic and country-study halves are not always tightly integrated; a reader looking for a synthetic account of, say, labor-market dynamics across all six economies must assemble it from material scattered across several chapters. Finally, while the volume is attentive to the EU's role as an external anchor, it engages less fully with the region's other significant economic partners and with the political-economy dynamics that complicate the reform agenda. The introduction gestures toward organized crime, smuggling networks, and state capture as legacies of conflict and sanctions, but these themes recede in the more technical chapters. Given how central governance and informality are to the region's growth prospects, a more sustained treatment would have strengthened the book's diagnosis.

These reservations should not detract from the volume's overall achievement. Western Balkan Economies in Transition succeeds in its central aim of providing a comprehensive, accessible, and empirically serious account of a region too often reduced to headlines about crisis and conflict. The editors and contributors, many of them leading authorities on Southeast European economies, have produced a work that will serve students, researchers, and policymakers alike. For the scholarly community concerned with Balkan economies and management, it offers both a useful reference point and a model of how regional economic analysis can combine rigor with policy relevance. It is, in short, a worthy addition to the literature and a fitting candidate for the attention of this journal's readership.