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Approved By
European Department

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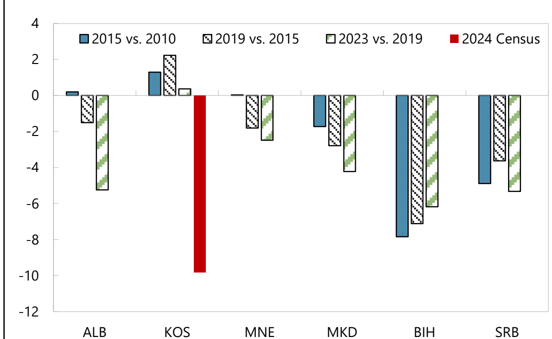
LABOR MARKET INTEGRATION AND MIGRATION[1]

This paper highlights recent trends in the Kosovo labor market and emigration. Like other Western Balkan countries, Kosovo experienced a sharp decline in population over the previous decade, as emigration increased. Using a structural model of the labor market and migration, the paper examines the potential impact of further EU integration. While lower migration costs hurt the economy, productivity convergence brought on by EU integration has an offsetting impact by increasing wages, lowering unemployment, and increase immigration. Policy simulations show that policymakers have a diverse set of tools—including structural reforms, active labor market policies, business support, and labor participation support—to boost potential and support the labor market.

A. Introduction

1. **An emigration-induced decline in the working age population and a low labor force participation rate are two important challenges facing Kosovo.** Preliminary information from the recently conducted census points to 10 percent decline in population since 2012, aligning Kosovo more with trends in other Western Balkan countries (figure). Emigration is the key reason behind a significant decline in population. Around one-third of people born in Kosovo live abroad, making Kosovo a country with one of the highest emigration rates globally (World Bank, 2024). Kosovo also has low labor participation and high unemployment rates, including in comparison to its regional peers (Figure 1). Although future population revisions may imply an increase, labor participation has remained flat at just under 40 percent over the past 10 years, well below the average of 69 percent in the other Western Balkan countries and 75 percent in the EU. Underlying these large gaps, the labor participation rate of women is one of the lowest in the world (see the next SIP). Notably, the unemployment rate has experienced a rapid decline, particularly in the post-pandemic period, falling from around 30 percent 10 years ago to around 11 percent in 2023.

Working-Age Population
(Percent change; age 15-64)



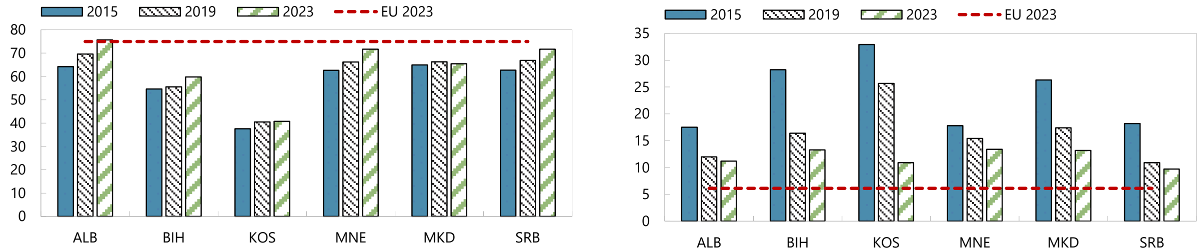
Source: World Development Indicators.

[1] Prepared by Stephen Ayerst.

Figure 1. Kosovo: Labor Participation and Unemployment in the Western Balkans and EU

Labor Force Participation
(Percent of population aged 15-64)

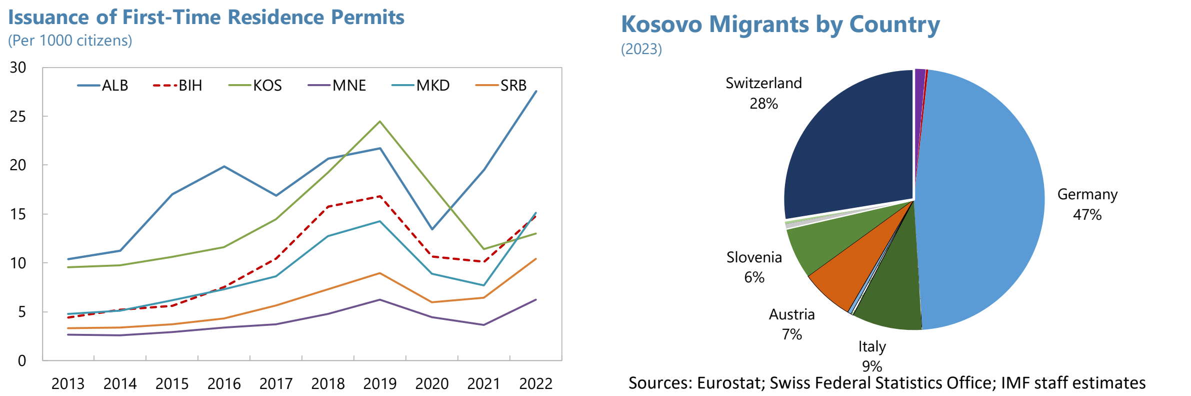
Unemployment
(Percent of labor force aged 15-64)



Sources: Haver, Eurostat, national statistics offices, and IMF staff calculations.
Notes: Changes in methodology and population estimates can affect comparability over time.

2. Large wage differentials and tight labor market conditions in the European Union (EU) countries have encouraged emigration from Kosovo. Empirical and survey evidence indicate that migration is induced by economic and non-economic factors. Ayerst et al. (2024) finds that migration flows tend to be stronger to destination countries with larger pull factors. That is, destination countries where wage, unemployment, and job-finding rates are higher relative to origin countries tend to have higher bilateral migration flows, indicating that workers, at least in part, migrate to economic opportunities. Net PPP-adjusted average wages in Kosovo are just over one-quarter of the values in Germany, underscoring strong pull factors. In addition, labor market shortages in the Western Europe have increased demand for migrant workers. This reflects broader trends in EU economies where labor market shortages have increased in the post-pandemic period encouraging entry of new groups into the labor market (Duval et al., 2022). For example, migration to Germany has recently accelerated following the June 2024 update to the Western Balkan Regulation, which increased the maximum number of work-related migrants from the region following growing labor market shortages in Germany (GAP Institute, 2024). Migration offers a potential solution for advanced EU economies to meet labor market shortages but creates a potential drain on labor market resources in Kosovo and other emerging economies. These pressures will likely increase as population aging leads to declining working-age populations in EU countries. While the pandemic and lockdown period led to some reversal, emigration rates remain high in the Western Balkan countries and function as a drain on especially young and talented workers (Figure 2, left panel). The main destination of Kosovo emigrants has been Germany and Switzerland (Figure 2, right panel).

Figure 2. Kosovo: Emigration and Destination Choices



Sources: Eurostat; SSO and IMF staff estimates.

Sources: Eurostat; Swiss Federal Statistics Office; IMF staff estimates

B. Tackling the Labor Market Challenges of EU Integration

3. Staff employ a structural model of the Kosovo labor market to understand the relationship between labor market dynamics and migration. The model extends a search and matching framework—in which unemployed workers search for vacancies posted by firms—to allow for inactivity and migration decisions made by households (see Ayerst and Zhang, 2024, for details).[2] In the model, households choose between inactivity, migration, or entering the domestic labor market as an unemployed worker. Firms incur a cost to enter the market and post vacancies for unemployed workers. The matching rate between unemployed workers and firms depends on structural factors (e.g., matching technology, cost of advertising vacancies) and equilibrium conditions (e.g., number of unemployed workers and firms). The model provides discipline in understanding the relationship between migration and domestic labor market factors. Workers weigh the expected economic benefits from finding employment abroad, remaining inactive, or joining the domestic labor market against preferences when making decisions. The model is estimated to match data on labor market activities and bilateral migration flows for 35 European countries, including the EU and Western Balkan countries.[3]

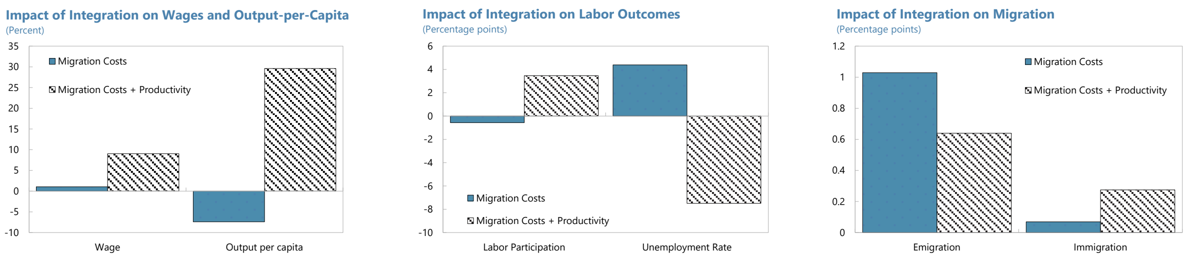
4. Staff use the model to examine the impact of further EU integration on the Kosovo economy. EU integration of the labor market is modeled as a reduction in the emigration cost allowing for individuals living in Kosovo to relocate to the EU more easily. The policy is calibrated to a reduction in the costs of migration by around 6.1 percent, corresponding to a doubling of emigration, which is similar to the impact of two countries each being EU members found when examining bilateral migration flows between European economies. The model is simulated under

[2] The structural model presents a stylized overview of European labor markets and necessarily abstracts from key dimensions impacting the Kosovar labor market that policymakers should consider in the design of policies. Importantly, the model does not explicitly include remittances, demographics, or informality.

[3] The model is calibrated to country-level data on the real PPP-adjusted net wage rate, the unemployment rate, the vacancy rate, transitions between activity and inactivity, transitions between unemployment and employment, and emigration and immigration rates. Kosovo is missing data on most of the outcomes and so the values for Kosovo are estimated using economic relationships and data for a panel of European economies, including other Western Balkan countries.

two scenarios corresponding to only lowering migration costs from Kosovo to other countries and to lowering migration costs and raising productivity. In the latter scenario, production of a worker-firm match is assumed to increase by around 10.5 percent relative to the baseline, implying an increase in output-per-capita of 30 percent (consistent with evidence in IMF, 2024, on new EU member states).

Figure 3. Kosovo: Impact of Further EU Integration on the Kosovo Economy



5. The benefits of EU integration can be supported through structural reforms. The simulations show that productivity improvements help retain workers and boost potential output relative to the "no reform" case (Figure 3). This is because the increase in productivity boosts domestic wages and incentivizes the entry of new firms, which in turn increases the job finding rate. This highlights the importance of combining EU integration periods with continued efforts to improve productivity through structural reforms. Policy that targets other aspects of the labor market can have similar positive effects on these outcomes implying that productivity growth alone does not need to be the sole measure of a policies success. While the experiment paints a stark picture for EU integration and emigration, it is also worth highlighting that EU integration may drive productivity growth in and of itself through reduced trade barriers and improved financial integration thereby providing more income and job opportunities in Kosovo (see, for example, Caliendo et al., 2021, and IMF, 2024).

6. Previous case studies of EU accession can provide valuable lessons on policy efforts. Table 1 summarizes policies implemented by Romania, Bulgaria, Poland, and Croatia around the time of EU accession along four main themes. First, policies designed to maintain cultural identities and traditional values to help maintain relationships with diaspora. Second, policies designed to motivate return migration of expatriates with benefits from the skills gained abroad. Third, policies designed to facilitate remittances to allow diaspora populations to benefit the local population. Finally, policies designed to tackle the shortage in the local workforce that emerged from increased emigration.

Table 1. Kosovo: Policies Lessons from Previous EU Accession Cases	
Policy Theme	**Examples**
Maintaining cultural identities and traditions.	• **Romania:** Institute for Romanian abroad offers support to diasporas in preserving their cultural and linguistic identity. • **Bulgaria:** state-funded Bulgarian Sunday Schools focuses on preserving the Bulgarian identity. • **Poland:** supporting the teaching of the Polish language among the Polish diaspora, especially children. • **Croatia:** Central State Office for Croats Abroad supports Croatian language classes overseas.
Motivating expatriates to come back	• **Romania:** targeting the return of Romanians by offering them grants for the implementation of projects. • **Bulgaria:** streamlining the settlement permit issuance for the returning expatriates; facilitating the (re)integration through online platforms such as Tuk-Tam and Back2Bg. • **Poland:** granting assistance in the form of travel reimbursements and free Polish language and adaptation courses; information campaigns and portals that encourage returns (i.e., Powroty) were launched. • **Croatia:** partnering with universities to offer scholarships, which incentivizes the return of Croatian emigrants and their descendants.
Facilitating the process of remittances	• **Poland:** aiming to prevent double taxation with all EU countries and other primary destination countries for Polish emigrants, facilitating the process of remittances.
Tackling shortage in local workforce	• **Romania:** attempted to increase the work permit quota to attract workers from non-European destinations such as Vietnam. • **Poland:** facilitating the employment of immigrants by speeding up issuance of work permits; extending the period of work for citizens of certain countries from 6 months to 24 months. • **Croatia:** complete removal of work permit quota since 2021.

7. **The model is used to simulate specific policies to improve labor market performance, raise potential output, and lower emigration.** Staff consider four broad classes of policies that are discussed in detail below. Table 2 summarizes specific examples of these broad policies.

- S*tructural reforms* that target the overall productivity of the economy are modeled as an increase in the output produced by a matched firm-worker pair by one percent.[4] Mechanically, the policies make firms more profitable, since they have higher revenues, leading firms to be more willing to post job vacancies. Workers can also bargain for higher wages, making both labor market activity and the domestic economy more attractive. In practice, these policies

[4] For the quantitative comparisons, a one percent increase in productivity is considered, which is substantially lower than in the previous experiment.

would capture reforms that improve operational efficiency through reducing barriers that misallocate resources across firms. Some examples would include tackling informality, increasing financial development, and reducing bureaucratic costs and corruption.[5]

- A*ctive labor market policies* (ALMP) that target the efficiency of matching firms and workers are modeled as an increase in the matching efficiency between unemployed workers and firms by 10 percent. Mechanically, the policies make it easier for unemployed workers to find jobs and for firms to fill vacancies increasing the relative values of entering unemployment and posting a vacancy. In practice, these policies would include standardizing accreditation of skills, reskilling and retraining programs, apprenticeship programs, job counselling, and job boards.

- S*mall- and medium-sized enterprise promoting (SME) policies* that help foster entry of new firms and job opportunities. These policies are modeled as a decrease in the cost of posting vacancies by 10 percent. Mechanically, the policies encourage more vacancies to be posted per unemployed worker leading to lower unemployment and more firm-worker matches. In practice, these policies would include reducing bureaucracy associated with starting new businesses, promoting entrepreneurial activities of local individuals, and tackling unfair business practices, such as those stemming from the informal economy or from large firms.

- *Labor participation policies (LP)* that encourage individuals to enter the labor market are modeled as a decrease in home production by 10 percent, which dictates the relative benefits of working and not working in the model. Mechanically, the policies increase the opportunity cost of not working leading to individuals becoming active in the market. Additionally, since the relative value of working increases to households, firms can bargain for marginally lower wages, increasing firm value and lowering the unemployment rate. In practice, the polices would capture reforms that increase the willingness of households to enter the labor market. One angle that policymakers could target in Kosovo is the large gender gap in labor participation, as discussed in the next SIP.

Table 2. Kosovo: Potential Policies for Candidate Countries

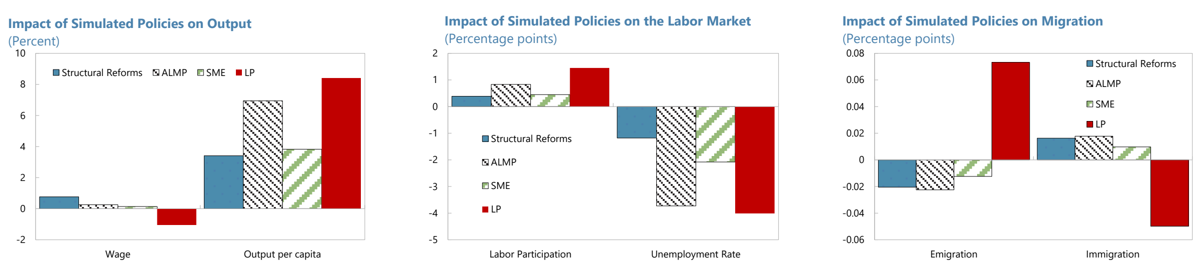
Policy Category	Example
Structural reforms	Improving governance and strengthening the rule of law through judicial reforms, including through reducing the backlog of cases and enforcement of contracts. Combating corruption by continuing to build a track record of investigations, prosecutions, and convictions. Improving the business and investment environment, including by reducing bureaucratic hurdles to attract investment and improving property rights. Developing and upgrading public infrastructure, including transport networks, digital infrastructure, and energy supply. Simplifying hiring and firing procedures to reduce the administrative burden on, especially small, businesses.

[5] See also Delechat and Medina (IMF 2020) for an overview on tackling informality. See Ayerst and Laoprapassorn (IMF 2024) for a quantitative examination of the impact of these types of structural barriers on productivity in a Western Balkan country.

Table 2. Kosovo: Potential Policies for Candidate Countries (Concluded)	
Policy Category	**Example**
Active labor market policies	Improving vocational training. Supporting personalized job search assistance. Implementing youth employment and apprenticeship programs. Improving labor market information systems that help provide accurate information on job vacancies, skill requirements, and employment trends as well as job seekers.
SME promoting policies	Establishing a one-stop shops for business registration. Reducing incentives for firms to remain informal. Tackling informality by increasing access to digital services (e.g., business registration, tax filing), simplifying tax procedures, and providing support for small businesses (e.g., training, advisory services, market access services).
Labor participation policies	Providing access to affordable and accessible childcare. Improving equality of quality and accessibility of educational services. Implementing gender budgeting.

8. **Simulations show that policymakers have a range of options to improve labor market outcomes and boost potential output**. While the magnitudes differ, the four policies all tend to increase output and wages and lower net emigration and the unemployment rate (Figure 4). In this respect, a key lesson from the simulation is that there is a wide range of dimensions according to which policies can be targeted to benefit the economy, shield against the loss of workers and population to emigration and increase the gains from further EU integration.

Figure 4. Kosovo: Policy Simulations



C. Conclusions

9. **Policies can bolster the labor market and be a catalyst for economic growth**. Ayerst et al (2024) find large structural barriers in the productivity of workers, the matching efficiency between workers and firms, and the cost of creating new vacancies in Kosovo compared to other European countries and other Western Balkan countries. Policies targeting these areas, such as those discussed in Table 2, could help lift the quality of the Kosovo labor market and boost potential. A key result from the policy simulations is that, while the policies target various stages of the labor market (e.g., participation, job finding, the productivity of the match), they have similar macroeconomic impacts. In this regard, it is important for policymakers to focus on policies with the largest potential impact relative to the cost of implementation. Additionally, policies should be combined with careful monitoring and updating to ensure that they remain effective and efficient.

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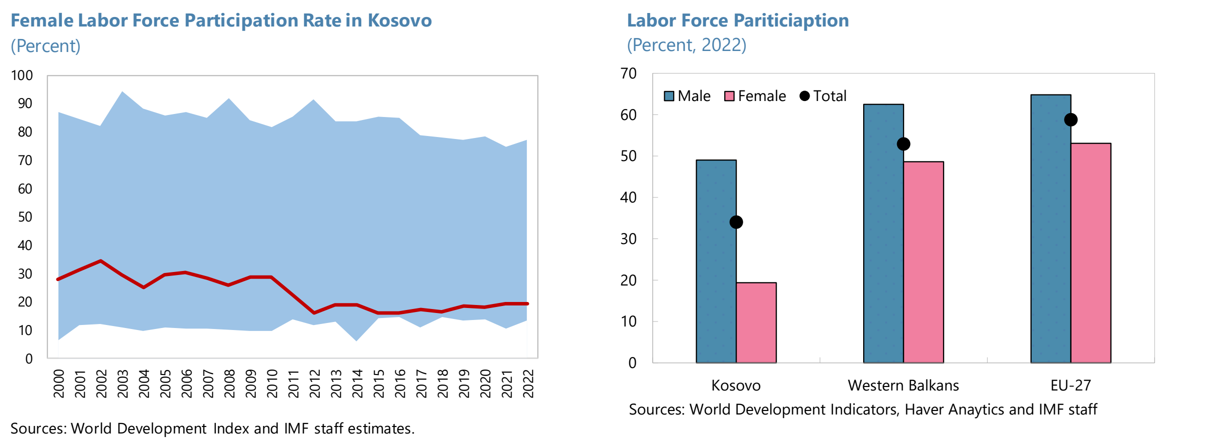
LABOR MARKET AND GENDER[1]

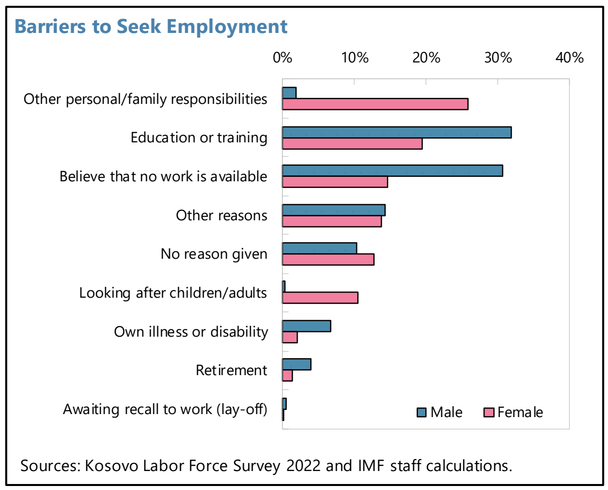
A. Introduction

1. A striking characteristic of the labor market in Kosovo is the extremely low level of women's participation. Using comparable data, Kosovo, with a female labor force participation (FLFP) rate below 20 percent, has the fifth lowest FLFP in the world, and lowest in Europe. Such a level of FLFP is an outlier compared to the Western Balkans region (45 percent) and the EU-27 average (55 percent), resulting in a gender gap of about 30 percentage points relative to the male participation rate in the labor force. Note that the FLFP has also declined since 2012 when it was about 30 percent.

Figure 1. Kosovo: Main Indicators of Female Labor Force Participation



2. Family responsibilities and the perception of lack of job opportunities contribute to the low FLFP.[2] According to the labor survey, the main reason for women's inactivity is family responsibilities, particularly childcare. High and persistent female unemployment has led to a large incidence of discouraged female workers. While education and training are additional reasons for not participating in the workforce, this is less pronounced for women compared to men highlighting that women are disproportionately affected by family obligations. In the labor survey, another factor for women not to look for employment is because they "believe



[1] Prepared by Javier Kapsoli and Sabiha Mohona. The authors would like to thank the participants at a workshop in Pristina for useful comments and suggestions.

[2] Gashi, Rizvanolli, and Adnett (2019) explore in detail the reasons behind the low level of FLFP in Kosovo.

that no work is available." Kosovo has one of the youngest populations in Europe with an average age of 30½ years. In general, younger populations tend to have lower activity rates. Social norms and stereotypical gender roles can also play a role.[3] The presence of a gender wage gap could also discourage women from participating in the labor market (¶6).

3. Over time, aging and migration will take a toll on long-term growth and welfare. Currently, Kosovo still enjoys a demographic bonus because of its young population, but this will be eroded by large emigration and declining fertility rates.[4] These trends will reduce the working-age population, thereby lowering long-term growth. The combination of informality and aging will cause increasing long-term pressures on the budget and private resources, weakening both wealth and welfare.

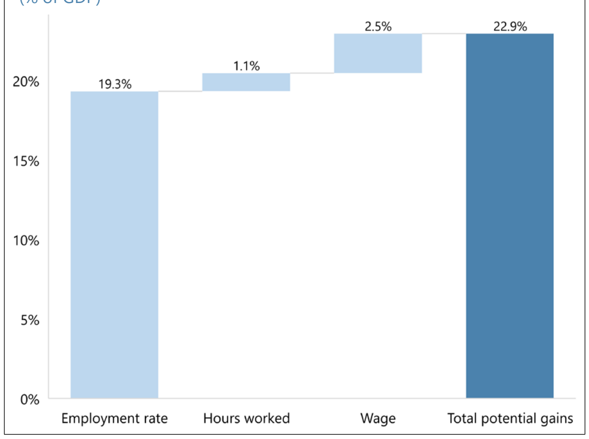
B. Growth Dividends from Integrating Women into the Labor Force

4. Increasing the participation of women in the labor force can counteract the adverse demographic trends and deliver a substantial growth dividend. If Kosovo reaches the average FLFP of the Western Balkans, an additional 180 thousand women could be incorporated to the labor force. To estimate the impact of reducing gender gaps in the GDP, we use the IMF's Equity Gain model, where the following equation is computed:

$$y_L = \sum_{ij} (P_j a_j) m_{ij} h_{ij} \omega_{ij}$$

where i represents occupations (economic sectors) and j is (female, male). y_L is the contribution to GDP, P_j a_j is the working age population by gender, m_{ij} is the gender share on each occupation, h_{ij} is hours worked by gender and occupation, and ω_{ij} is hourly earnings by gender and occupation.[5] This equation produces a counterfactual scenario where each aj, m_{ij}, h_{ij}, *and* ω_{ij} is sequentially substituted for its corresponding male benchmarks to compute the gain of eliminating each gap. The model estimates an overall gain of 22.9 percent in GDP that can be decomposed as follows: i) 19.3 percent from closing the employment gap, ii) 1.1 percent from eliminating the working hours gap, and iii) 2.5 percent from reducing the wage gap.

Potential Gain to GDP From Closing Labor Market Gender Gaps
(% of GDP)



[3] Democracy for Development Institute (2017) conducted an *ad hoc* survey to study the issue of low FLFP and found that one of the main reasons of discrimination against women in the labor market is a patriarchal mindset.

[4] The fertility rate went down from 2¾ children per woman in 2000 to 1½ in 2022.

[5] The Equity Gain model is an adaptation of the methodology proposed by Buckman and others (2021).

C. Gender Wage Gap

5. A gender wage gap is observed in the labor market. For Kosovo, previous attempts to quantify the gender wage gap used the Blinder-Oaxaca (BO) decomposition (Blinder 1973; Oaxaca 1973). The BO method consists of estimating two Mincerian equations: $\omega_{ij} = X_{ij}'\beta_j + u_{ij}$ where j = male, female, ω_{ij} are wages and X_{ij} is a vector of endowments. After estimation, the averages can be expressed as:

$$\bar{\omega}_m - \bar{\omega}_f = [\bar{X}_m' - \bar{X}_f']\hat{\beta}_m + \bar{X}_f'[\hat{\beta}_m - \hat{\beta}_f]$$

where the first term in the right-hand side (RHS) is called the characteristics effect, describing how much of the difference in wages is explained by the difference in levels in the components of the endowment vector (e.g., education, experience, age,). The second term is called the coefficients effect, describing how much the difference in wages is due to differences in the magnitude of the coefficients. The latter is interpreted as discrimination against women. Note that the term $\bar{X}_f'\hat{\beta}_m$ represents the counterfactual wage for women if they were paid as men. Studies by the Kosovo Agency for Gender Equality (2020a) and Gashi and Adnett (2020) applied BO to the 2017 Labor Force and Time Survey.[6] Both built models using monthly wages and specific human capital endowments and found a gender wage gap of about 14 percent. Gashi and Adnett additionally estimated the gap at 6 percent using hourly wages.[7]

6. The BO decomposition has limitations. There are two issues with the BO method. First, any parametric method requires a series of assumptions that are not always valid: distribution of the errors, functional form, etc. In contrast, non-parametric methods are flexible and do not require assuming a predetermined structure or assumption. Second, BO assumes that there is enough common support between the empirical distributions of individual characteristics for females and males. Often in gender studies, it is not possible to find comparable individuals with common characteristics. This problem of lack of common support will be more pronounced when job characteristics are included in the model. For example, we may not find a young male working in a nursing care home or in a childcare institution. As BO fails to account for this problem, they are implicitly assuming validity outside the sample with common support (out-of-support assumption).

7. The gender wage gap can also be estimated using matching, a nonparametric method. Nopo (2008) proposed using matching as a tool to decompose wage gaps. Matching is a nonparametric method (no need to estimate Mincerian equations) where the contrafactual mean wage is computed only for the common support (no out-of-support assumption is needed). The method applies the following decomposition:[8]

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[6] This is an *ad hoc* survey commissioned by the Millenium Challenge Corporation (MCC) which has more detailed information compared to the regular labor survey conducted by the Kosovo Agency of Statistics (KAS).

[7] Wage per hour is the preferred variable, as women tend to work in activities marked by longer hours, often in the informal economy with no overtime payment (e.g., cleaning, nursing, childcare).

[8] See Djurdjevic and Radyakin (2007) for a detailed derivation of this equation.

$$E(\omega|m) - E(\omega|f) = [E_S(\omega|m) - E_S(\omega|f)] + p_{\bar{S}|m}[E_{\bar{S}}(\omega|m) - E_{\bar{S}}(\omega|m)] + p_{\bar{S}|f}[E_{\bar{S}}(\omega|f) - E_{\bar{S}}(\omega|f)]$$

where S represents the common support, $\bar{S}$ represents out of the common support, and $p_{\bar{S}|x}$ is the probability of the set S under the distribution of x (male or female). The first term in the RHS is the difference in wages between males and females in the common support only. The second term is the difference in men wages in and out the support while the third term is the difference in women wages in and out the support. Similar to BO, it is assumed that the differences in wages between males and females in the common support can be divided in a part explained by endowments (Δ_x) and a residual (Δ_O) which measures discrimination. Therefore, a final presentation will be:

$$\Delta = \Delta_x + \Delta_O + \Delta_m + \Delta_f$$

8. Using matching, we obtained a wage gender gap higher than previously estimated. We used the 2022 Labor Force Survey and a model where wage per hour (in logs) is explained by experience, education, and economic sector (NACE 2-digits). We found a wage gap of 10.7 percent, which means that after controlling for the endowments over the common sample and accounting for the impact of unmatched individual's wages, there still exists a relevant unexplained portion of the difference between men and women wages implying discrimination. This number compares to the 6 percent previously found by Gashi and Adnett (¶6) indicating that the gender wage gap could have been underestimated. Note that Δ_x is positive, which means that the part of wages explained by endowments is positive in favor of women. This could be related to the lower FLFP, indicating that only the best-qualified women are participating in the labor market.

Table 1. Kosovo: Results of the Economic Analysis

Sample Matching Results

	Matched	Unmatched	Total	Average wage
Male	608	98	706	€2.293
Female	260	15	275	€2.243
Total	868	113	981	€2.279

Source: IMF staff estimations

Matching Decomposition

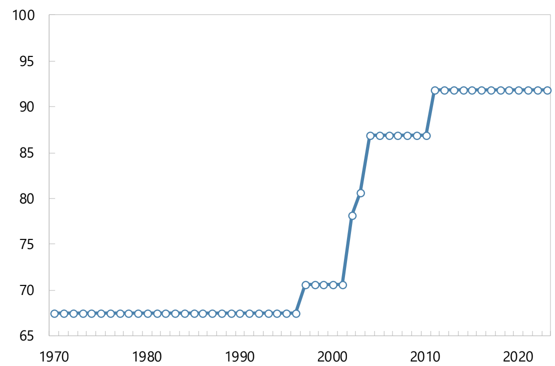
Δ	-0.0226
Δx	0.0850
Δ_O	-0.1079
Δm	-0.0069
Δf	0.0072

Source: IMF staff estimations

D. Conclusions

9. The legal framework against discrimination is strong but implementation remains weak. Kosovo has various laws that formally protect and promote equal treatment of women and men. It scores 91.9 out of 100 in the 2023 World Bank's Women, Business, and the Law (WBL) index showing an increasing trend over time.[9] There is also a policy document of the Government of Kosovo, which sets forth the goals, measures, and main actors bearing the responsibility to integrate gender.[10] However, there remains a significant gap between legislation and implementation. This has been further supported by the World Bank's 2024 report on women and the law, which highlights that "Kosovo has the largest difference between the expert opinions score and the legal frameworks score in the region."[11]

Women, Business and the Law Index



Source: The World Bank.

10. Several policies to increase the FLFP can be implemented. Across different countries, some policies have proven effective in increasing FLFP and could be applied in Kosovo.

- *Increasing access to affordable and accessible childcare and parental leave*. World Bank (2015) found that women are discriminated in the labor market because of the cost of maternity leave which is one of the longest in the world (12 months of which 9 months are paid). A reform option could be combining maternity and paternity leaves with some financing from the budget as proposed by Dobranja (2022).

- *Expanding educational opportunities for women*. Developing targeted programs and training to support women re-enter job market after long-term unemployment and to support female entrepreneurs would be important policies. Employment training should be aligned with market demands by emphasizing skills that employers require or anticipate, ensuring that training and work experience correspond to current and future job opportunities (Democracy for Development Institute 2017).

- *Introducing gender budgeting practices*[12]. Since 2015, gender budgeting has been mandatory in Kosovo (Law on Gender Equality). However, implementation has been weak as it is challenging to implement gender-responsive budgeting without performance-based budgeting (Public Expenditure and Financial Accountability Gender Responsive Public Financial Management Assessment Report 2022).

- *Providing better work-life balance policies.*[13] Practices like teleworking could be more widely implemented.

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[9] The WBL index assesses how laws and regulations impact women's economic opportunities across various areas, including mobility, workplace, pay, marriage, parenthood, entrepreneurship, assets, and pension.

[10] Kosovo Agency for Gender Equality (2020b).

[11] World Bank (2024).

[12] Gender budgeting, also called Gender Responsive Budget, is an approach to budgeting that uses fiscal policy (taxes and expenditures) to promote gender equality, and girls' and women's development (Stotsky 2016).

[13] Mentioned by participants in a workshop in Pristina.

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FINANCIAL BUFFERS IN A EUROIZED ECONOMY[1]

A. Introduction

1. **Since its inception, Kosovo has not issued its own currency.** Immediately after the 1998–99 war, a UN Mission in Kosovo (UNMIK) was installed in Kosovo per the mandate of Security Council Resolution #1244. In September 1999, the UNMIK announced the adoption of the German mark as the official currency. Following the official circulation of the euro in the EU in January 2002, Kosovo unilaterally adopted it as its legal tender.[2]

2. **The adoption of the euro as the legal tender involves significant economic advantages and structural limitations.**[3] Unilateral euroization helps strengthen macroeconomic stability by "importing" the monetary policy credibility of the ECB and eliminating the possibility of fiscal dominance, since deficits cannot be monetized. It also reduces sovereign risk by eliminating exchange rate risk and transaction costs, resulting in lower financing costs for private firms and the Treasury. However, adopting another country's currency as a tender also has disadvantages, such as the inability to use monetary policy for macroeconomic stabilization, the loss of seigniorage revenue, and, importantly, the absence of a central bank that can act as a lender of last resort (LOLR).

3. **The LOLR function is somewhat needed in euroized economies as well.** In fractional-reserve banking, where banks are required to keep only a part of their deposit liabilities as reserves and use the remainder to make new loans, the central bank is the ultimate guarantor of system stability. LOLR functions by providing short-term loans to banks facing sudden periods of high demand for liquid assets, thereby preventing an individual problem from worsening, or turning into a systemic panic. Although high liquidity in the banking system and strong bank supervision may reduce the need for LOLR support, it does not eliminate it entirely. In Kosovo, banks have ample liquidity, and the Central Bank of Kosovo (CBK) has been enhancing its bank supervision function. However, as financial deepening continues and the financial sector expands rapidly, potential liquidity risks may emerge in the future. While the CBK cannot act as a full LOLR, it can still address bank liquidity pressures using domestic banks' excess, and required reserves, as well as government deposits.

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[1] Prepared by Javier Kapsoli and Ezgi Ozturk.

[2] The term unilateral euroization refers to the adoption of the euro as legal tender without membership in the Economic and Monetary Union (EMU) of the European Union (EU). Conversely, the formal or contractual euroization implies membership in EMU and the ability to issue euro banknotes. Montenegro and San Marino are the other two unilaterally euroized countries. Please see Lindquist (2018) and Laurens and Flamini (2010) for reserve adequacy discussions in Montenegro and San Marino, respectively.

[3] This paragraph highlights the elements that are more relevant for the purposes of this note. For a detailed assessment of the benefits/disadvantages of euroization, see Levasseur (2004), Wójcik and Backé (2004), and Laurens and Flamini (2010).

B. Measuring Reserve Adequacy in a Euroized Economy

4. Euroization affects the concept of foreign currency reserves. In Kosovo, euro is not only the domestic legal tender but also the foreign exchange reserves. The IMF Balance of Payments Manual (IMF 2009) defines reserves as "external assets that are readily available to and controlled by monetary authorities for meeting balance of payments financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes (such as maintaining confidence in the currency and the economy and serving as a basis for foreign borrowing). Reserve assets must be foreign currency assets and assets that actually exist." This definition emphasizes two conditions for an asset to be considered as part of reserves: (i) it must be denominated in a foreign currency that is widely accepted in transactions worldwide, and (ii) it must be readily available. In a euroized economy where the euro is adopted as the legal tender, every asset held by the monetary authority is denominated in euros; therefore, the first condition is always fulfilled.

5. In a euroized economy, reserves are primarily held for precautionary motives. Countries hold reserves for various reasons, including to operationalize monetary or exchange rate policies, financing transactions in foreign currency for international trade or debt obligations, hedging against emergencies, and investing to obtain financial gains. Most of these reasons do not apply to a euroized economy, which does not have monetary or exchange rate policies and can conduct external transactions seamlessly with every asset circulating in the economy, as they will always be denominated in a foreign currency that conducted directly or easily exchanged. Moreover, holding reserves for investment purposes is limited to countries with large external surpluses, often coming from natural resource exports. Consequently, the principal motive for holding reserves in a unilaterally euroized economy is precautionary—hedging against emergencies.

6. The Fund has worked extensively on indicators to measure reserve adequacy. In addition to several traditional metrics of reserve adequacy in the literature (e.g., months of imports), an IMF policy paper on Assessing Reserve Adequacy (ARA) (IMF 2015) proposed a metric to assess reserve adequacy for emerging market economies based on four possible drains from the balance of payments: (i) export income, to account for terms of trade or external demand shocks; (ii) short-term debt, to cover for short-term external liability shocks; (iii) other external portfolio liabilities, to cover for equity and debt shocks; and (iv) broad money, to cover for a deposit run. Each of these components is multiplied by a relative risk weight based on the 10th percentile of observed outflows for emerging market economies. As the sample for euroized/dollarized economies is small, there is no separate formal metric proposed for countries with no separate legal tender.[4] However, euroized economies can be approached as an extreme case of hard peg, for which the IMF has proposed the following formula (IMF 2016):

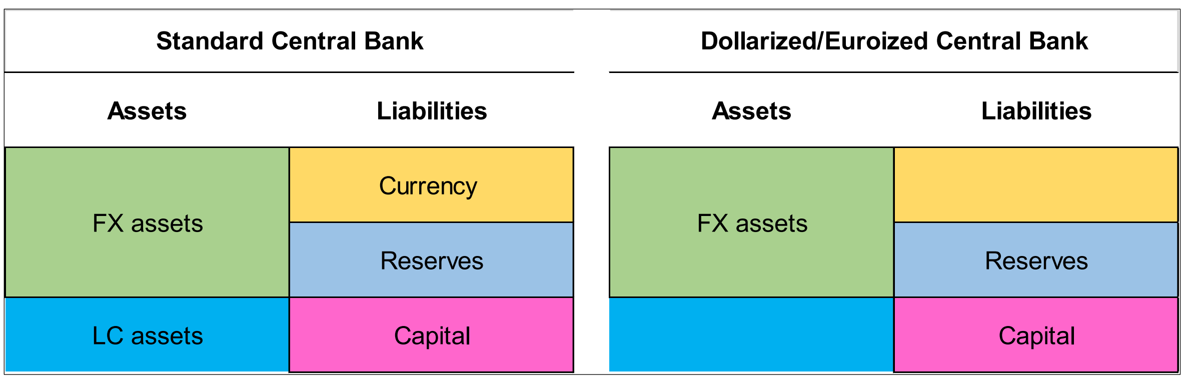
$$RA = 0.1\, M2 + 0.2\, OPL + 0.3\, STD + 0.1\, X$$

[4] According to the latest AREAER report, in 2022, 14 countries do not have separate legal tender. They are Andorra, Ecuador, El Salvador, Kiribati, Kosovo, the Marshall Islands, the Federated States of Micronesia, Montenegro, Nauru, Palau, Panamá, San Marino, Timor Leste, and Tuvalu.

where RA is the adequate level of reserves, M2 is broad money, OPL is other external portfolio liabilities, STD is short-term external debt, and X is exports. In this formula, M2 captures potential residents' capital flight through the liquidation of their highly liquid domestic assets, STD reflects debt rollover risk, and X reflects the potential loss from a drop in external demand or a terms of trade shock. The coefficients reflected in this formula reflect the regression results from the IMF policy paper on ARA (IMF 2016) for economies with fixed exchange rate regimes, not including the dollarized/euroized economies.

7. In a euroized economy, the policy capacity of the central bank is limited. The central bank balance sheet, in a dollarized/euroized country, does not have assets denominated in local currency or cash in circulation on the liabilities side (Table 1). In Kosovo, raising reserves can be through either accumulation of government deposits or increasing bank required and excess reserves. Banks in Kosovo are required to hold 10 percent of total deposits at the CBK as required reserves. Historically, most of them used to hold even more than that, so there have always been some excess reserves. During a liquidity shock, such as a bank run, bank reserves would provide help to meet immediate demand for withdrawals, but recourse to government funds may also be needed. Therefore, accumulation of government deposits has a stronger role as a source of raising reserves.

Table 1. Kosovo: Stylized Balance Sheet of a Central Bank



8. Readily available reserves at the CBK are limited. Being readily available is the second condition for a foreign-denominated asset to be considered as reserves. From the CBK balance sheet, at end-2023, most of the €1,362 million transferable deposits are reserve requirements from depositary corporations (ODC) and government deposits which are €511 million. However, not all of them are readily available reserves. For example, €165 million are deposits of the Privatization Agency of Kosovo (PAK) and €38 million are IMF RSF lending funds earmarked for the purposes of

Liabilities at the Central Bank of Kosovo
(In million of euros)

	2022	2023	2024 [1/]
Total deposits	1,331	1,362	1,485
Transferable deposits	1,331	1,362	1,185
ODC and others	745	852	651
Central government	586	511	534
o/w PAK	*166*	*165*	*172*
o/w ELA	*46*	*46*	*46*
o/w RSF	*0*	*38*	*47*
Term deposits	0	0	300
Other liabilities	375	275	281
Total liabilities	**1,706**	**1,637**	**1,766**

[1/] As of September.

Memo

Stock of usable government deposits	347	240	247

Sources: Kosovo authorities and IMF staff estimates.

the RSF arrangement. The remaining €286 million transferrable deposits, which include €46 million deposited in the CBK specifically for emergency liquidity assistance (ELA), are readily usable resources. Treasury cash management operations, which were reactivated in April 2024 to be intermediated by the CBK by placing €300 million in term deposits at the CBK, should not be considered as available for emergency purposes. Even for the readily available resources, it is important to have a clear institutional framework, backed by the corresponding legal instruments, for their use in case of a liquidity emergency.

9. Government deposits are also needed to fund the Treasury in cases of emergencies. In addition to being needed to support a liquidity emergency in the financial system, government deposits could be needed to hedge the Treasury against adverse shocks to revenues or expenditures. However, there is no consensus about how big a buffer this should be. Hürcan, Koç, and Balibek (2020) reviewed the experiences of different countries and listed different options, most of which are related to the amount of spending and debt services over different periods of time.

Table 2. Kosovo: Recommended Liquidity Buffer
(In percent of GDP)

	Non-EU based banks			All-banks		
10 percent of banks' deposits	3.1	3.1	3.1	6.4	6.4	6.4
One month current spending	1.6			1.6		
One month total spending		1.9			1.9	
One month total spending plus external debt service			2.4			2.4
Recommended liquidity buffer	4.6	4.9	5.4	7.9	8.2	8.7
Stock of free disposal deposits including ELA (end-2023)	3.0	3.0	3.0	3.0	3.0	3.0
Deposits required to reach recommended level	1.7	2.0	2.5	5.0	5.3	5.8

Source: IMF staff estimates

10. The ARA metric can be adapted to capture the peculiarities of the Kosovo's monetary regime.[5] We simplified the ARA equation to focus only on broad money, which can be replaced with bank deposits. Importantly, of the 12 banks that were operating in Kosovo as of 2023, the three largest ones had EU-based parent companies, holding half of banking sector deposits (see text table)[6]. We can consider a scenario where these banks are supported by their parent companies that have access to the ECB lending facilities. Additionally, as discussed above, we need to add a precautionary buffer for the Treasury. As there is no consensus about the size of

Banking System 2023

	Bank	Deposits (mill. euro)	Parent Company
1	Raiffeisen Bank Kosovo	1,219	
2	NLB Banka	1,008	
3	Banka Tregtare Kombëtare	956	
4	ProCredit Bank	954	
5	Türk Ekonomi Bankası	723	
6	Economic Bank	537	
7	Bank for Business	417	
8	Turkiye Is Bankasi	84	
9	Komercijalna Banka AD Beograd	79	
10	Ziraat Bank	74	
11	PRIBANK SH.A.	57	
12	Credins Kosovë SH.A	48	
	Total	**6,155**	

Sources: Central Bank of Kosovo and IMF staff estimates.

[5] This paragraph follows the findings of Wiegand (2013).

[6] One of the banks (Komercijalna Banka AD Beograd) voluntarily withdraw from the market in 2024, bringing the total number of banks to 11.

this component, we can consider three different metrics following IMF (2016): (i) one month of the central government's current spending, (ii) one month of total spending, and (iii) one month of spending plus external debt service. Adding all the components and deducting the available stock of ELA funds, we find the *additional* government deposits ranges between 1¾–5¾ percent of GDP or €160–560 million. Given that these resources are held with the purpose of primarily addressing liquidity emergencies, they need to be maintained in the form of transferable deposits or money market assets.

C. Conclusions

11. Maintaining such a level of government freely available deposits can be costly. At end-2023, the Treasury had 2½ percent of GDP in freely available deposits. To reach the minimum proposed in this note, it would need to accumulate an additional 1¾ percent of GDP (about €175 million). As discussed in the 2024 Article IV staff report, Kosovo has large development needs, particularly in infrastructure, that would make it politically challenging to justify a large accumulation of resources at the CBK. Furthermore, holding a high level of liquid deposits implies a large cost of carry. Against this backdrop, the authorities can explore other options to reduce the need to accumulate large government deposits. For instance, a private lender of last resort that can be modeled based on the Ecuadorian Financial Liquidity Fund.[7] Other option, that the authorities are using, is a REPO line with the ECB (€100 million) which expires on January 31, 2025 but can be renewed.[8] In any case, the need for liquidity buffers and how they are constituted should be an essential part of a more ambitious and comprehensive strategy for effectively managing assets and liabilities in Kosovo.

[7] The Ecuadorian Fund was created by law in 2009 with the specific mandate to act as lender of last resort for the financial system. It is funded by 3 percent of private banks deposits.

[8] The ECB offers the Eurosystem's repo facility for central banks (EUREP) to non-euro area central banks.

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ECB MONETARY POLICY PASSTHROUGH TO BANK INTEREST RATES DURING TIGHTENING[1]

During the recent tightening cycle, transmission of the ECB policy rate to market rates in Kosovo—a unilaterally euroized economy—has been limited. This is true even when compared to regional peers with similar exchange rate regimes. This chapter analyzes the size of the transmission to bank interest rates and the underlying factors limiting the passthrough.

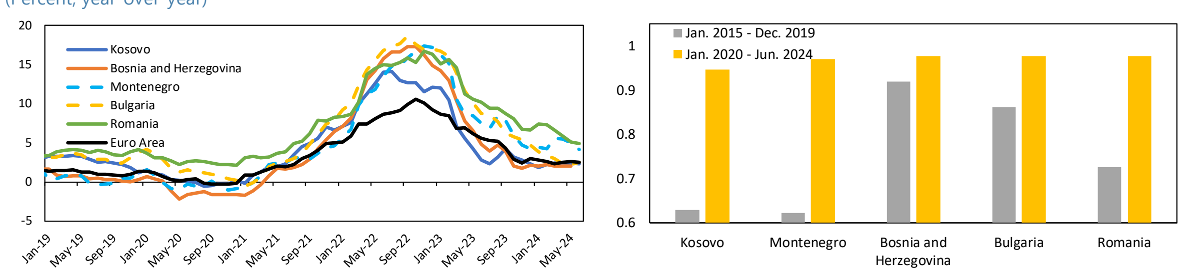
A. Inflation Episode of 2021–23

1. **Inflation surged in Europe, including in Kosovo, in 2021–22 following post-COVID-19 recovery and Russia's war in Ukraine.** Euro area inflation increased from around 1 percent in early 2021 to a peak of 10.6 percent in October 2022. In Kosovo, inflation spiked faster, peaking at 14 percent in July 2022, up from around 1 percent in early 2021. Inflation peaks for other countries with similar exchange rate regimes were even higher. For instance, in unilaterally-euroized Montenegro, inflation peaked at 17.5 percent in November 2022, and in Bulgaria, which has a currency board and peg to the euro, inflation peaked at 18.7 percent in September 2022. In the period following the pandemic, which included the inflation surge, the-year-over-year inflation correlation between the euro area and these economies increased compared to five years preceding the pandemic. This increase was more pronounced in Kosovo and Montenegro.

Figure 1. Kosovo: Inflation Synchronization

Inflation
(Percent, year-over-year)

Correlation of Year-Over-Year Inflation with the Euro Area



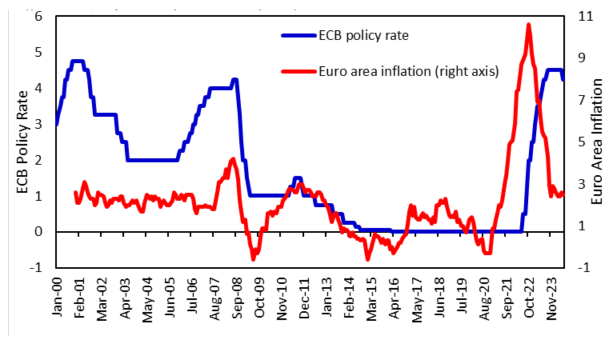
Sources: National statistics office of respective countries, and Haver Analytics.

2. **Following the surge of inflation, the ECB implemented the most aggressive monetary policy tightening since the ECB came into existence, effectively leading to a rise in bank interest rates both in and out of the euro area.** Between June 2022 and September 2023, the ECB policy rate increased significantly, from 0 percent to 4.5 percent. This represented a faster and stronger tightening compared to the previous most substantial tightening episode,

[1] Prepared by Ezgi Ozturk (EUR). For a more detailed analysis, please see a recent IMF study by Beyer et al (2024) on monetary policy passthrough to interest rates in 30 European economies, which includes euro area and non-euro area countries with independent monetary policy. This chapter complements facts presented in the Beyer et al study by documenting facts on the passthrough to bank rates in Kosovo, Montenegro, Bulgaria, Bosnia and Herzegovina, and Romania, which were not included in the study.

which recorded an escalation from 2 percent in December 2005 to 4.25 percent in September 2008. Passthrough of changes in the policy rate to economic agents' financial decisions is key to the effectiveness of the monetary policy transmission mechanism.[2] In this context, the literature suggests that the ECB's policy rate changes have been effective not only in euro area but also in non-euro area economies.[3] This paper complements earlier studies by documenting the ECB policy rate passthrough to bank rates in unilaterally euroized economies as well as economies with managed floating exchange rates or a currency board.

Euro Area Monetary Policy Rate and Inflation



Source: European Central Bank.

B. Response of Bank Rates in Kosovo to ECB Policy Tightening

3. Bank interest rates in Kosovo increased following the ECB policy tightening, however the passthrough has been limited, particularly for lending rates. Both lending and deposit rates in Kosovo inched up since the beginning of the ECB tightening cycle. However, this increase has been much smaller than in the euro area. For instance, from the start of the ECB tightening cycle in July 2022 to August 2023, non-financial corporations (NFC) loan rates increased by 3 percentage points (pp) in the euro area but by only 0.9 pp in Kosovo.[4] The increase in Kosovo was similar to that observed in Montenegro, the other euroized western Balkan economy, 1.1pp, and lower than that observed in Bosnia and Herzegovina or Bulgaria, which have currency boards and pegs to the euro, and Romania, which has a managed floating regime. Similarly, the increase in deposit interest rates in Kosovo has been smaller than the euro area. But, in contrast to NFC loan rates, NFC deposit rates in Kosovo increased by 1.1 percentage points, which is close to what was observed in Bosnia and Herzegovina, and Bulgaria.

[2] Changes in the policy rate affect short-term interbank interest rates, and in turn, affect bank lending and deposit rates, which are affecting investment and consumption-savings behaviors, debt service costs, and financial constraints of households and firms, and profits and lending capacity of banks (Beyer et al, 2024).

[3] For instance, Moder (2021) analyzes the long-run co-movement between the ECB policy rate and the deposit and lending rates in countries outside the euro area, excluding those with unilateral euroization, and shows that more than one third of all euro retail rates in these countries are closely linked to the ECB monetary policy rate; domestic monetary policy rates have less impact on retail rates for loans denominated in euros, suggesting that domestic central banks can only partially influence the euro part of the interest rate channel.

[4] The passthrough from policy rates during the recent tightening cycle has been weaker for most of the bank rates than the previous tightening cycles in the euro area. For instance, per one percentage point increase in ECB policy rate, on average, NFC loan rates increased by 0.7 pp during the recent tightening episode and 0.9 pp during earlier tightening episodes.

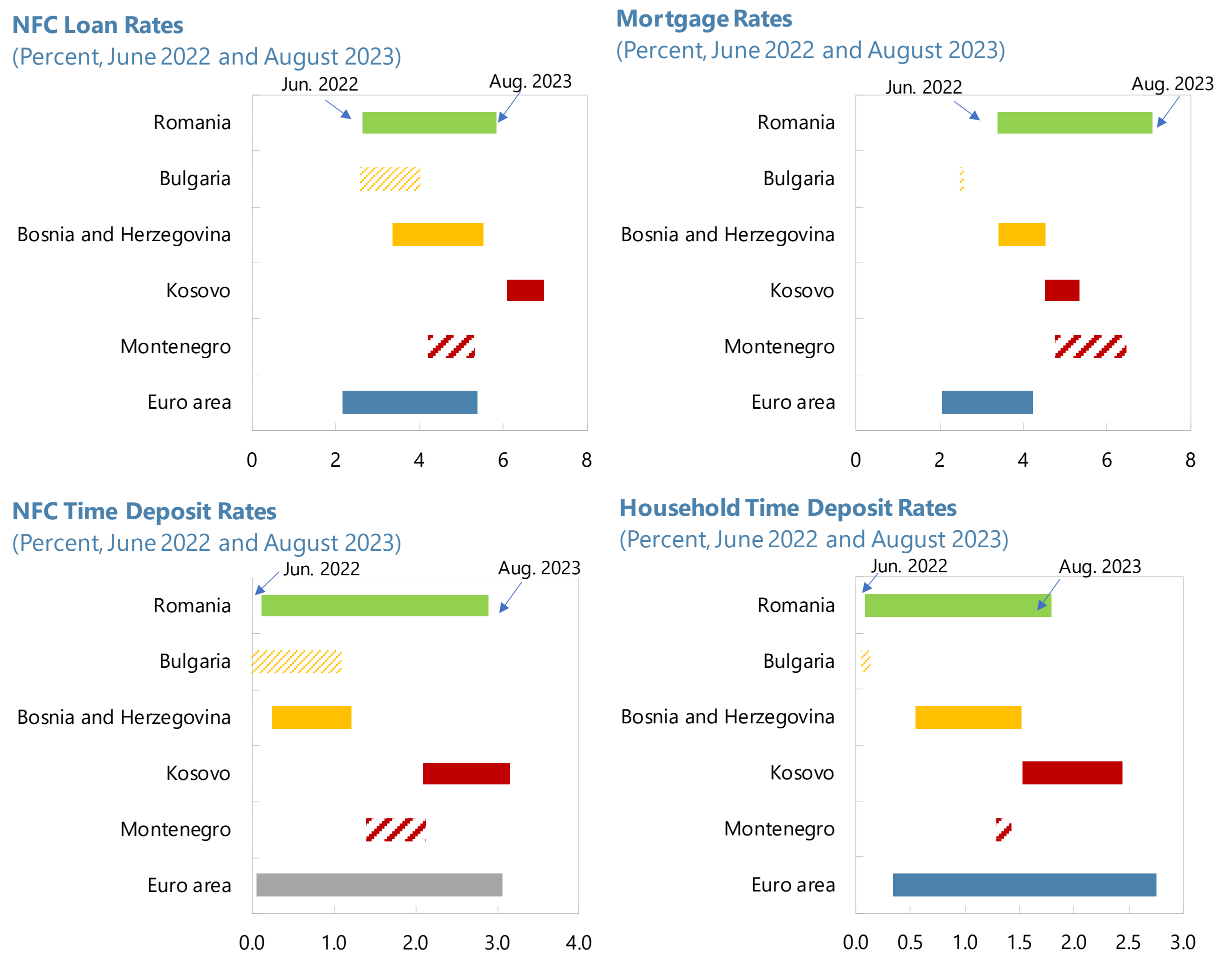
Figure 2. Kosovo: Cumulative Changes in Bank Rates

(Percentage points, 2022M6–2023M8)

4. Just before the ECB's tightening measures, loan and deposit rates in Kosovo were higher than in the euro area and comparable economies. For instance, mortgage rates in the euro area in August 2023 were still lower than the level of mortgage rates in Kosovo at the beginning of the tightening cycle in June 2022. This contrast reflects different levels of financial market development and risk perception. Deposit rates being high initially can be explained by bank dependence on local deposits more than on wholesale funding (and consequently paying a higher price to attract deposits). Although banks with the largest customer shares in Kosovo are subsidiaries of foreign banks, the system is still affected by Kosovo-specific risks, while Kosovo is still developing the financial sector's legal and regulatory framework.

Figure 3. Kosovo: Bank Rates During the ECB Monetary Policy Tightening

(Percent, 2022M6–2023M8)

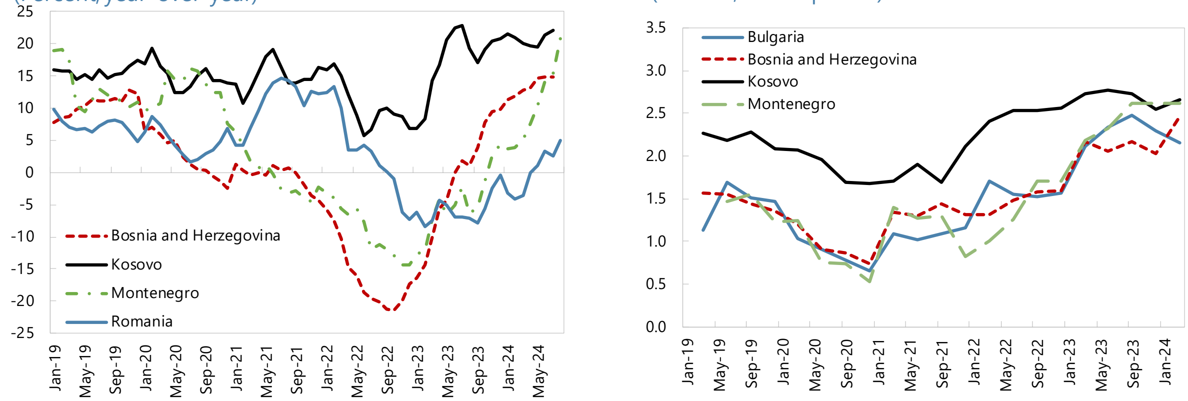


5. **During the recent ECB monetary policy tightening, private sector credit growth has been larger, and banks have been more profitable in Kosovo than in comparator economies.** Profitability of banks in Kosovo has always been stronger than the banks in comparator economies, with larger credit growth despite high lending rates. Although keeping the leading position in profitability, the gap on profitability with banks in comparator economies has narrowed.[5] This could be partially explained by stronger ECB policy rate pass-through to loan rates in these economies than Kosovo.

[5] The IMF 2024 Article IV report on Montenegro confirms that net interest margins have widened in Montenegro, leading to record levels of bank profitability.

Figure 4. Kosovo: Private Sector Credit Growth and Bank Profitability

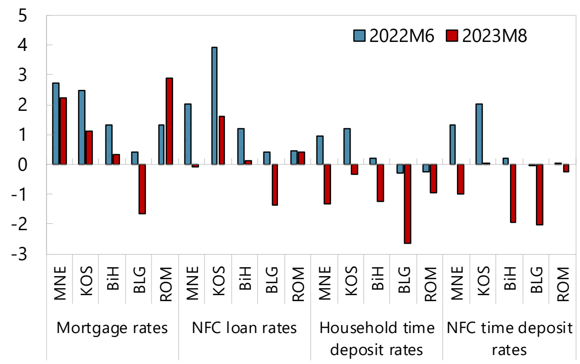
Real Private Credit Growth (Percent, year-over-year) | **Bank Profitability** (Percent, end of period)



Sources: Central banks of respective countries and Haver Analytics.

6. The more subdued passthrough of the ECB monetary policy rates to bank interest rates in Kosovo contributes to the convergence towards the euro area interest rate anchor. A euroized country's interest rates are expected to converge to the anchor euro area average interest rate over time as the financial sector develops. Gaps between interest rates in Kosovo and the average rates in the euro area were larger at the beginning of the tightening cycle than those in comparator countries. Following the tightening, the gaps have narrowed with the help of the weaker passthrough in Kosovo. For instance, the gap with euro area time deposit rates is smaller in Kosovo than other comparator economies, where the size of the passthrough has been similar or even larger than Kosovo, but the initial rates were much lower.

Gap Between Bank Rates in Euroized Economies vs. Rates in the Euro Area
(Percentage Points)



Sources: European Central Bank, other national central banks of respective countries, and Haver Analytics.

C. Factors Behind Low Interest Rate Passthrough

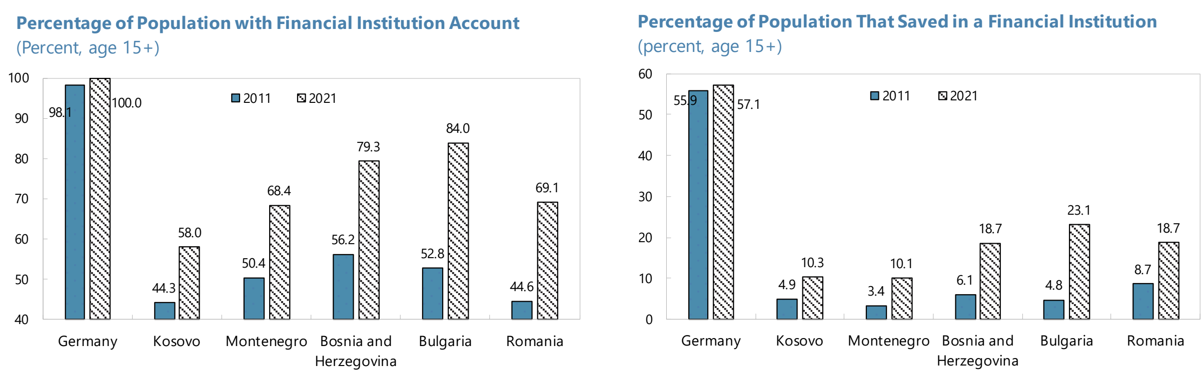
7. Several factors could explain lower passthrough of ECB rates to bank rates in Kosovo. Based on literature (Saborowski and Weber, 2013; De Bondt, 2005; Messer and Niepmann, 2023), we identify three of most relevant factors contributing to a more limited passthrough.[6]

[6] Saborowski and Weber (2013) identified country characteristics that have important effects on the effectiveness of interest rate transmission, including indicators of regulatory quality, inflation, financial development and dollarization, exchange rate flexibility, as well as banking sector competition, asset quality and liquidity. De Bondt (2005) showed that credit risk considerations can largely explain the adjustment speed of deposit and lending rates in response to changes in policy rates. Messer and Niepmann (2023) showed that high levels of liquidity is likely to explain the weak passthrough to deposit rates as banks do not have strong incentives to attract deposits when liquidity is abundant.

- **Financial development.** The level of bank rates is closely related to the degree of financial development, which has three key dimensions: financial deepness, inclusion, and efficiency (IMF, 2015). Financial deepening fosters competition; liquidity-enhanced financial inclusion broadens participation in the financial system and expands the deposit base; and, improved financial efficiency reduces costs in the system. Together, these create a favorable environment for lower bank rates. During the recent ECB tightening episode, two opposite forces influenced the passthrough to bank rates in Kosovo. While the ECB monetary tightening put an upward pressure on bank rates, ongoing financial developments created a downward pressure on already high rates. The acceleration of private credit growth during the recent ECB tightening may indicate advancing financial deepening. Although financial inclusion in Kosovo improved, the latest statistics from 2021 suggest that it remains well below the levels seen in other economies in the region. The implementation of new policies, such as the introduction of free basic accounts and formalization efforts which continued during the period of ECB tightening suggests further improvements in financial inclusion. Furthermore, the adoption of technology—such as introducing online loan applications—and enhanced risk management practices, driven by stronger financial supervision, suggests improved financial efficiency. All of these have likely placed downward pressure on bank rates, offsetting the upward pressure of the ECB tightening, which is argued to be stronger for economies with higher degree of financial development.

Figure 5. Kosovo: Financial Inclusion, 2011–21

(Percent)

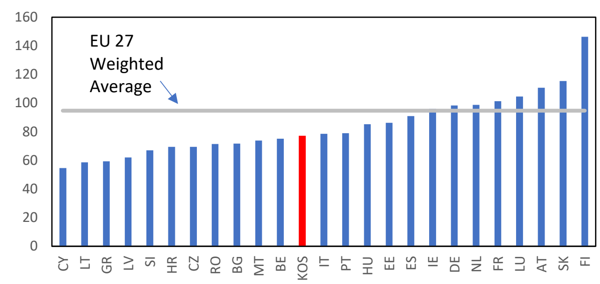


Sources: World Bank and FINDEX Database.

- **Liquidity.** Ample liquidity in the banking system of Kosovo during the ECB tightening episode could also explain the lower passthrough. The lower loan-to-deposit ratio in Kosovo compared to the euro area, along with a higher ratio of liquid assets to short-term liabilities relative to some large European economies, like France, the Netherlands, and Spain, suggest that banks in Kosovo had less incentives to compete for additional deposits. Moreover, despite the increase in remuneration on excess reserves from -0.7 percent to 0 percent in August 2022, bank excess reserves held at the CBK declined significantly during the ECB tightening, indicating that banks resorted to using their liquidity rather than attracting deposits.[7]

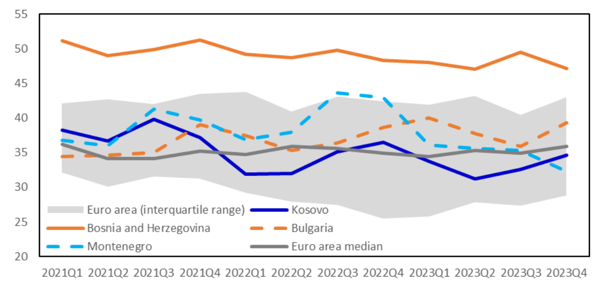
Figure 6. Kosovo: Liquidity Indicators

Loan-to-Deposit Ratio, 2022
(Percent)



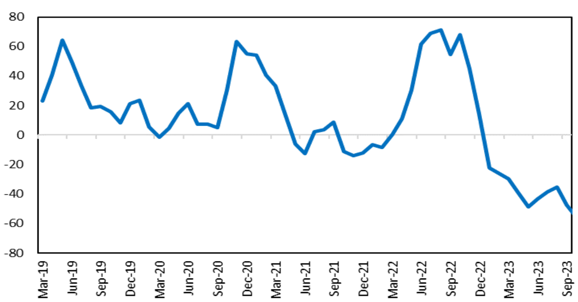
Sources: European Central Bank, other national central banks of respective countries, and Haver Analytics.

Liquid Assets to Short-term Liabilities
(Percent)



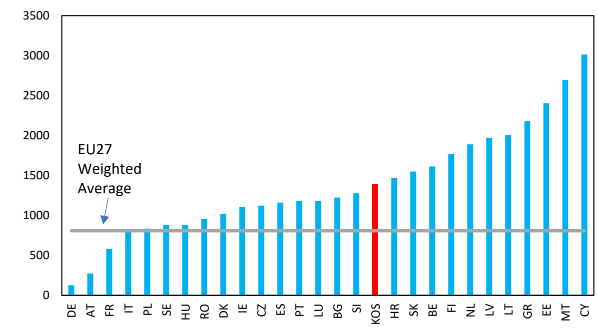
Sources: European Central Bank, other national central banks of respective countries, and Haver Analytics.

Changes in Excess Reserves
(Percent, year-over-year, 3-month moving average)



Sources: Central Bank of Kosovo and IMF staff calculations.

Herfindahl Index for Credit Institutions Total Credit, 2022
(Index ranging from 0 to 10.000, based on total assets)



Sources: European Central Bank, other national central banks of respective countries, and Haver Analytics.

- **Bank concentration:** Kosovo has higher bank concentration compared to the euro area average. Higher bank concentration, measured through the Herfindahl index of total assets of credit institutions, indicates lower competition and possibly lower passthrough of monetary policy rates to deposit rates during tightening episodes (Kho 2023). Banks in Kosovo may not need to compete as strongly to attract deposits. This observation is in line with the strong profitability ratios experienced in the banking sector of Kosovo in 2022–23. Moreover, in Kosovo, the impact of high bank concentration may be amplified by the fact that banks are dominant players in the financial sector as other forms of financial intermediation are relatively underdeveloped.

[7] One other dimension of increased liquidity in the banking system is that the government securities held by private banks have not been rolled over and as a result the banking sector had around €50 million of extra liquidity during the tightening episode.

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THE CHALLENGE OF PENSION REFORM IN KOSOVO[1]

1. Kosovo's independence demanded a fundamental rethinking of economic and social policies, including the objectives and structure of the pension system. Due to various financial, legal, and administrative constraints, the newly-independent country was not in a position to continue operating the same social protection system as before. New social protection programs—including both social assistance and social insurance schemes—were narrower in terms of risks covered and offered lower benefit levels than similar programs in other European emerging economies. At the outset, certain risks and benefits often covered by state social security—such as loss of breadwinner, childcare, unemployment, and work injury—were omitted from the safety net. In other ways, Kosovo followed the example of other countries of the former Yugoslavia: war-related, categorical benefits have filled the void left by a rudimentary social policy system.

A. The Pension System in Kosovo

2. Since its inception, a basic pension and mandatory individual accounts have formed the key element of Kosovo's pension system. Both were established in 2002, following policy and technical advice of international financial institutions, most importantly the World Bank. The original concept was devised in consideration of the serious macroeconomic, labor market, financial sector, and public administration constraints of a newly-independent Kosovo.

3. Over the years, the pension system has expanded to include a variety of merit pensions, occupational pensions, and a legacy pension. Apart from the typical disability and survivor benefits, there are special benefits for war veterans, war invalids, people who contributed to the pension system in former Yugoslavia, miners, teachers, and the army. All in all, more than a dozen pension schemes exist, with an additional ten different sub-schemes in the pension scheme for war invalids. Many of these schemes function as a form of social assistance or unemployment benefits, both of which would serve society well, but are difficult to implement given high informality and inadequate tax compliance.

The Core of the Pension System

4. A universal basic pension is available to all citizens of Kosovo who reach the retirement age, which is set at 65 years for both men and women. This pension is designed as a fixed, non-contributory payment, about 18 percent of the average wage in 2023, aimed at providing a minimum safety net for the elderly population. It is funded entirely through the state budget and is not contingent on any previous employment or contributions to the pension system. While the basic pension law allows for indexation to inflation, in practice the adjustments have only been made on an ad hoc basis, with the latest adjustment in October 2024 by 20 percent and the one before in early 2022.

[1] Prepared by Boele Bonthuis (FAD) and Selim Thaçi (local office).

5. In addition to the basic pension, there is a defined-contribution provident fund managed by the Kosovo Pension Savings Trust (KPST). Employees are required to contribute 5 percent of their gross salary to this fund, with an equal contribution of 5 percent from their employers. Contributions are pooled and invested in various financial instruments. Upon reaching retirement age, individuals can withdraw their accumulated savings either as a lump sum or as periodic payments. Early withdrawal is permitted under specific conditions, such as severe illness or permanent disability. Like Chile or Peru, extraordinary withdrawals were allowed from KPST pensions during the Covid-19 pandemic. Around 10 percent of savings were withdrawn.

Special Pension Regimes

6. The pension system in Kosovo provides various "merit pensions" to participants and victims of the independence struggle, which are available to mostly able-bodied working-age individuals without age thresholds or work history requirements. These pensions are not conditioned on income or assets and include a wide array of benefits such as war invalids' pensions, civilian invalids' pensions, and survivor pensions for widows, orphans, and caretakers. Eligibility for these pensions is more relaxed compared to other benefits, focusing on merits earned during the pre-independence struggle or disability linked to the war; this has led to a skewed age distribution towards working-age recipients.

7. Merit pension levels are largely discretionary creating significant disparities across different benefit types. War veterans' pensions, which are among the most important war-related benefits, have seen an increase in recipients, now numbering over 38 thousand, with eligibility based on affiliation with the Kosovo Liberation Army. These pensions, significantly higher than basic pension, are paid regardless of age but cease upon receiving other income or reaching retirement age, in the latter case they are replaced by a supplement to ensure total benefits remain consistent. Additionally, families of deceased or missing individuals during the war receive varying levels of benefits based on the deceased's status, and individuals with war-related disabilities have access to pensions that are more generous than standard disability pensions.

8. Occupational pensions primarily cater to certain public sector employees, including those in the Kosovo Security Forces (KSF), the Kosovo Protection Corps (KPC) and teachers.[2] Eligibility criteria for occupational pensions can include years of service and specific job descriptions. Benefits from these pensions generally exceed those of the basic pension and may include both a fixed amount and additional benefits based on criteria such as rank or years of service. This paper will not discuss pensions for the security forces of Kosovo.

9. For teachers, a new pension scheme was established in 2019 to recognize the contributions of educators who worked in the alternative Albanian-language education system during the 1989–99 period, which was not officially recognized. This scheme covers various educational staff and provides supplemental benefits to retirees, calculated as a percentage

[2] There are also special pensions for Trepca miners and the Shota folkdance group.

of elementary school teachers' current base pay. In 2023, approximately 14 thousand recipients benefited from these supplements.

10. The pension system recognizes past entitlements for individuals who contributed to the pension scheme in the former Yugoslavia, granting special ex-contributory benefits to those with at least 15 years of contributions before 1999. Initially a fixed benefit, the scheme was differentiated in 2016 based on educational attainment, resulting in varied benefit levels that exceed the basic pension.[3] By 2023, nearly 50 thousand received these benefits, with a notable disparity between male (40 thousand) and female (10 thousand) recipients reflecting historical labor participation trends. The increasing number of beneficiaries and benefit levels has led to a significant rise in government spending on legacy pensions, placing pressure on public finances.

11. The newest addition in special pension benefits was the result of a constitutional court ruling stating that non-teaching workers who served during the independence war are eligible for partial ex-contributory pensions. Workers with 5–14 years of contributions can now receive a partial pension, a significant shift from the prior requirement of 15 years. This has led to an additional number of beneficiaries of 7.5 thousand.

Disability and Survivor Pensions

12. Disability pensions are provided to individuals who have been assessed and certified as permanently disabled. The assessment process involves evaluations conducted by authorized medical bodies. The benefit amount for disability pensions is typically calculated based on the individual's previous earnings and the length of time they contributed to the pension system. Additionally, recipients of disability pensions may be subject to periodic reviews to confirm their ongoing eligibility.

13. Finally, survivor pensions are available to dependents, such as spouses or children, of deceased individuals who were active contributors to the pension system or who were receiving a pension at the time of their death. The benefit amount is usually a percentage of the deceased individual's pension or contributions, and specific rules govern how benefits are allocated among multiple dependents.

B. Issues

14. The pension system in Kosovo has undergone significant changes since its inception nearly two decades ago, yet it remains affected by a lack of a clear vision and overarching policy objectives. Attempts to introduce earnings-related pension schemes have surfaced amidst growing discontent with the current system.

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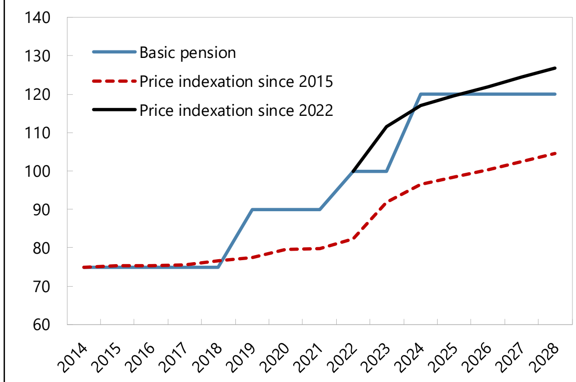
[3] Individuals with eligibility to receive pensions under different schemes will not receive basic pension unless the latter is higher than the benefit under alternative scheme.

15. Adjustments to pension benefits are often ad hoc without clear policy rationale. Even though the law, adopted in June 2014, allows for adjustments of pension benefits to the cost of living, the basic pension has been updated three times since 2014 (in 2019, 2022 and 2024). In 2022 double basic pension benefits were awarded in April and October, again with unclear policy rationale. If the full price indexation would have been followed since 2022—the last time the benefit was updated prior to 2024 update—this would have largely resulted in similar benefit levels, protecting pensioners better against drops in real income without the risk of the perception of politically-motivated adjustments.

Basic Pension in Kosovo—Actual and Counterfactual



Sources: Kosovo Authorities and IMF staff estimates.

16. A significant gap exists in the social protection framework, particularly the absence of unemployment benefits. This gap drives demand for various pension benefits that often do not serve their intended purpose, such as protecting people from the loss of employment income. Since some of these benefits prohibit employment, their design is exacerbating the self-reinforcing cycle of low labor force participation and low KPST pensions.

Fiscal Considerations

17. Fiscal considerations appear to play a limited role in shaping pension system legislation. The introduction of various occupational and merit pension schemes has occurred without comprehensive medium- or long-term fiscal impact analyses. This lack of long-term projections undermines policymakers' ability to evaluate the potential effects of demographic changes, labor market dynamics, and macroeconomic conditions. As a result, this oversight may lead to decisions with adverse fiscal and welfare implications.

18. High expenditures on merit pensions significantly constrain the fiscal space available for enhancing anti-poverty income replacement programs. The social protection system is disproportionately focused on benefits related to wartime service, while traditional social assistance programs, such as cash transfers, fall short in eligibility and benefit levels. Currently, less than 40 percent of public pension spending is allocated to the basic pension, while significant amount is spent on benefits to working age people (Table 1). This inadequacy hampers the system's effectiveness in addressing poverty.

Table 1. Kosovo: Overview of Spending, Number of Beneficiaries and Average Benefit by Scheme

	Number of beneficiaries (thousand)	Spending (EUR million)	Average monthly benefit (EUR)
Basic pensions	145.9	185.4	106
Ex-contributory pensions	48.1	122.3	212
Veterans	36.8	73.7	167
Pensions of families of war martyrs and invalids	13.0	39.0	251
Pensions of disabled persons	19.2	26.8	117
Teacher's pensions	13.3	13.9	87*
Paraplegic and Tetraplegic Pensions	2.8	11.5	346
Families with children with disabilities	3.1	10.5	277
Partial ex-contributory pension	6.4	10.3	135
Scheme for the blind	1.8	5.1	236
Pensions of the Kosovo Security Forces	0.7	4.0	452
Family Pensions	3.1	3.8	102
Pensions of the Defense Forces of Kosovo	1.3	3.4	215
Pensions of Trepca	1.5	2.3	127
Pensions of disabled workers	0.1	0.1	101

Source: Kosovo authorities.

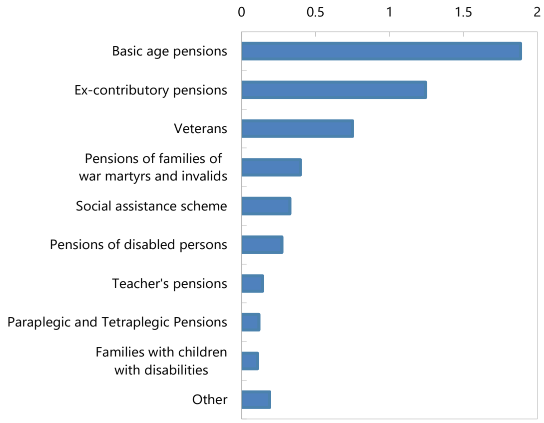
Note: *in addition to basic pension.

19. Demographic factors introduce additional complexity to the pension system. High fertility rates, combined with relatively low life expectancy, contribute to an old-age dependency ratio that is significantly below the European average. Although Kosovo has a youthful population, it is undergoing a rapid aging process. This swift demographic shift, along with high spending on special schemes and the emergence of additional pension schemes, puts upward pressure on total pension spending. Despite being one of the youngest countries in Europe, projections suggest that the old-age dependency ratio will nearly triple over the next three decades, sharply contrasting with trends in other European nations.

20. The projected increase in the old-age dependency ratio will exert upward pressure on pension spending. Assuming the basic pension remains unindexed from 2023 onwards, spending on this benefit could decline from just under 2 percent of GDP to below 0.5 percent of GDP by 2100. However, this scenario has already been overtaken by recent events (the 20 percent increase in pensions implemented in October 2024). This shows how much these ad hoc adjustments influence the spending path. It also shows that no indexation going forward appears unlikely. A more realistic assumption is that pensions will generally follow price trends. In this case, pension spending is expected to rise to 2.5 percent by 2040, stabilize for an extended period, and then decrease to below 2 percent of GDP after the 2080s, when the old-age dependency ratio stabilizes.

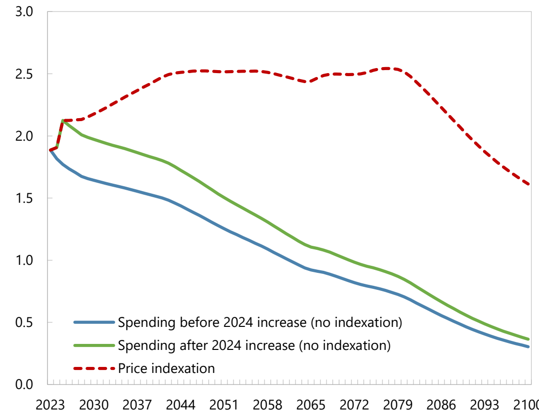
Figure 1. Kosovo: Current Spending and Spending Projections for the Basic Pension

A) Spending
(Percent of GDP)



Sources: Authorities and IMF staff calculations.

B) Projections of Spending on the Basic Pension
(Percent of GDP)



Source: IMF staff calculations.

Equity and Fairness

21. The significant discrepancies between merit pensions and other pension benefits raise questions about equity and fairness within the system. Individuals qualifying for merit pensions can receive lifelong support without the necessity of employment, while others may receive relatively small pensions despite a lifetime of work. This disparity is particularly notable among individuals with disabilities, where the distinction between war-related and other disabilities lacks a basis in medical assessment. Furthermore, the absence of partial disability benefits for those not in the war disability system creates additional inequities.

22. Inconsistencies in the tax treatment of pension benefits raise further concerns about equity. While KPST pensions are subject to personal income tax, pension benefits paid by the government, including war-related ones, are exempt. However, after amendments to personal income tax law introduced in August 2024, which raised zero-rated threshold to €250 (from €80), taxing government paid pension benefits would not generate significant tax liability as most benefits are below the new zero-rated threshold. Nonetheless, subjecting these benefits to income tax could enhance equity within Kosovo's tax system and reduce the net fiscal burden of these benefits in the future, especially after the benefit levels rise above the zero-rated threshold. Additionally, requiring KPST contributions could improve the fairness of the overall pension system, making it easier to phase out post-retirement supplements.

Impact on Labor Supply

23. The provision of lifelong cash benefits to able-bodied individuals and those with minor disabilities negatively affects labor supply and perpetuates informality within the labor market. Many recipients of such benefits do not require ongoing financial support for their pre-independence activities, yet they receive state financial aid that serves as a disincentive to seek formal employment. The structure of these benefits discourages labor market engagement, as future pension entitlements are independent of the recipients' employment behavior.

24. The absence of temporary survivor pensions further complicates the labor market landscape, particularly for working-age widows. While regulations around young survivors' pensions align with international norms, spousal benefits create disincentives for labor supply. This is especially pertinent for women, whose labor participation rates are already low. Most advanced economies provide temporary pensions to survivors younger than the retirement age, allowing them time to adjust their financial and employment situations. Such measures are absent in the Kosovo context.

C. Policy Options

25. The basic objectives, structures, and constraints of pension policy should be defined in a framework law that serves as a benchmark for both current and proposed pension schemes. The existing, fragmented regulatory framework should be simplified and aligned with a pension policy framework established by an act of parliament.

26. While spending on the basic pension remains relatively low compared to international standards, there should be a more restrictive approach to special pension benefits. The creation of new pension benefits should be limited by law. This would create fiscal space to consistently index the basic pension with prices and make it a more effective pension to keep elderly out of poverty.

27. To enhance the clarity and effectiveness of pension indexation, it is essential to clearly define the index used for adjustments. The current law mentions both Cost of Living Adjustment (COLA) and inflation, leading to confusion and inconsistency. It is recommended to adopt a single, clearly defined index to ensure that pension adjustments are based on transparent and objective criteria. The choice between COLA and CPI depends on whether one believes that the elderly consume a significantly different basket of goods and services. Over longer periods, the two measures typically do not differ greatly. CPI is preferred due to its clearer definition and objective nature. Indexation should be backward-looking, as this method relies on statistical data, while forward-looking indicators tend to be influenced by political considerations. However, this backward-looking method can result in delayed adjustment in benefits, which can become problematic during periods of sudden high inflation. It is therefore crucial to have additional social safety net tools available, which are currently crowded out by merit-based pensions.

28. The calculation of the index should be delegated to an independent statistical agency rather than the Ministry of Finance. This change would support the objectivity and credibility of the index, ensuring that it does not become a political issue. Such a move would improve public trust in the pension adjustment process and align with best practices observed in other countries.

29. Lastly, to address the potential for excessive discretion regarding pension adjustments due to fiscal constraints, it is important to establish clear rules governing the budgetary

process and pension contributions. Rather than wide authority based on budgetary space, specific guidelines should be developed to ensure that pension increases are protected from arbitrary cuts or increases during financial downturns and upturns (or elections).

30. If fiscal pressure of the basic pension becomes problematic, it would be prudent to link the retirement age to life expectancy at 65. The law on pensions financed by the state mandates a review of the retirement age at least every five years. However, until now this has not been done. Once reliable statistics on life expectancy at retirement become available, this long overdue review should be conducted and ideally the retirement age should be linked to life expectancy. One option is to increase the retirement age with two-third of life expectancy gains at 65, keeping the ratio of working life to retirement roughly constant.

31. Teachers' complementary pensions should ideally be replaced with a lump sum payment. Benefits should be indexed to prices rather than administratively set wages, allowing for separate wage and benefit-setting mechanisms. This would reduce the overall cost of public sector wage increases and provide more stability in benefit values during periods without public wage adjustments. The government might also consider offering a lump sum that is significantly lower than the total expected discounted benefit stream.

32. Expenditures on merit pensions and the net present value of these schemes' liabilities should be reduced, reallocating savings to better-targeted social cash transfers. Since discontinuing various merit pensions, especially for war veterans, is politically unfeasible, alternative methods could be employed to limit expenditures (and allow for additional support for poverty-alleviation measures), improve labor supply, reduce informality, and create fiscal space. Options include:

- Make war veterans' pensions and other merit pensions for able-bodied working-age individuals subject to income tax and KPST contributions.
- Make pension supplements for war veterans above retirement age subject to income tax.
- Offer a one-time lump sum payment to working-age war veterans and war disability pensioners instead of monthly payments, reducing the present value of their expected benefit. Make the lump sum income tax-exempt if transferred to a KPST account, per the beneficiary's choice.
- For surviving spouses more than five years younger than retirement age, replace lifelong survivor pensions with temporary benefits payable for one year.

USING DIGITALIZATION TO ENHANCE PUBLIC FINANCE IN KOSOVO[1]

Kosovo has embarked on a journey of digital transformation, developing digital infrastructure to provide access to households, companies, and educational institutions and modernizing its public finance system through GovTech.[2] Digitalization and GovTech can facilitate Kosovo leapfrogging into advanced infrastructure and public service delivery. While Kosovo has achieved significant milestones—including nearly universal Internet coverage and a comprehensive front-end e-Kosova portal—unconnected systems, relatively high consumer prices for digital inclusion, limited digital skills, and cybersecurity risks hinder the full realization of digital benefits. To fully reap the benefits of digitalization, Kosovo must coordinate its digital transformation efforts, modernize its tax and public financial management systems, and implement targeted digital literacy programs.

A. Kosovo's Approach to Digital Transformation

1. **For over a decade, Kosovo has demonstrated a strong political will to accelerate digital transformation and leverage GovTech solutions to modernize public administration**. In 2013, the country adopted its first national digital strategy, the Digital Agenda of Kosovo 2013–20 (DAK 2020), which aimed to develop digital infrastructure, promote the production and use of electronic content, and enhance citizens' digital literacy. In 2015 the government started a modernization project to build a more advanced digital administration. The commitment to this digital vision was further solidified in 2018 when Kosovo secured US$ 20.7 million in support from the World Bank for the Kosovo Digital Economy (KODE) project (World Bank 2023a, 2023b, 2023c), aimed at improving access to high-quality, high-speed broadband services. By March 2023, the last remaining non-connected village was linked to high-speed Internet (with speeds of up to 100Mbps), achieving one of the highest Internet coverages in Europe.[3] To ensure civic engagement in shaping and implementing its digital agenda, Kosovo also joined the Increasing Civic Engagement in the Digital Agenda (ICEDA) project, co-financed by the European Union, and led by the Metamorphosis Foundation.

2. **Building on these foundational efforts, the government has renewed its plans for a comprehensive digital transformation through the Digital Agenda of Kosovo 2030 (DAK**

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[1] Prepared by Carolina Bloch, Mariano Moszoro, Mona Wang, Frank van Brunschot, and Yasemin Hurcan (all IMF Fiscal Affairs Department). The authors are thankful to counterparts and interlocutors from the Digital Transformation Unit, Ministries of Economy, Finance, Interior, Agriculture, Health, Education, and Social Policies and Families, Tax Administration of Kosovo, Public Procurement Agency, Agency for Information Society, Regulatory Authority of Electronic and Postal Communications, Central Bank of Kosovo, Telecom of Kosovo, World Bank, and USAID.

[2] Government Technology—or GovTech—is defined as the application of technology to improve the delivery of government services, enhance government operations, and promote citizen engagement and participation in governance.

[3] Cf. https://www.worldbank.org/en/news/press-release/2023/03/21/-every-village-in-kosovo-now-connected-to-high-speed-broadband-internet-with-world-bank-support (accessed November 2024).

2030). This new digital agenda sets an ambitious vision to turn Kosovo into a "gigabit society"[4] and position the country as a competitive digital economy through five strategic goals: 1) establishing an advanced secure digital infrastructure, 2) driving the digital transformation of businesses, 3) enhancing the digitalization of public services, 4) fostering a digitally skilled population and innovative R&D ecosystem, and 5) strengthening the cybersecurity framework. The DAK 2030 aims to achieve full national 5G coverage and provide gigabit connections to all households and businesses. It also seeks to bring all key public services and medical records online, attain 90 percent adoption of digital IDs among citizens, and reach 80 percent adoption of cloud computing, AI, and big data technologies among companies.

3. As a cross-sectoral agenda defining digital policy priorities for Kosovo, the DAK 2030 is the cornerstone of the country's digitalization framework, complemented by other strategic documents outlining e-government and sector-specific measures (Figure 1). The e-Government Strategy 2023–27, adopted in October 2023 and constituting a cornerstone of the DAK 2030, sets clear goals for the next phase of digitalization of fiscal operations, emphasizing interoperability among government agencies and the digitalization of essential public services to citizens. This strategy, coupled with the Public Administration Reform Strategy, the Administrative Burden Prevention and Reduction Program, and the Cyber Security Strategy, supports Kosovo's broader vision by prioritizing efficiency, transparency, and accessibility of public services through secure digital means. Digital transformation is also featured in other strategic documents of key public sector areas, particularly health, education, and information and communication technologies (ICT).

Figure 1. Kosovo: Strategic Framework for Digitalization

Source: Kosovo e-Government Strategy 2023–27.

[4] "Gigabit society" means any household, shop, vehicle, mobile device, etc., has access to a high-speed Internet connection above 1 Gbps.

B. Enablers of Digitalization in Kosovo

4. Kosovo has made considerable progress in establishing digital infrastructure and implementing measures to expand Internet access in the country. As of 2022, 99.8 percent of households had access[5] to the Internet and 100 percent of enterprises had broadband connectivity—27 percent of which is fiberoptic—positioning Kosovo among the most connected countries in the region (Figure 2). Additionally, 99.5 percent of the population is covered by at least a 3G network, with 4G and 5G covering 94 percent and 65 percent of the territory, respectively.[6] Kosovo's Internet user costs are relatively high, at 2.3 percent and 1.4 percent of monthly GNI per capita for fixed broadband and mobile cellular data basket, respectively (Figure 2).[7] The KODE project, initiated in 2019, has been pivotal in extending fiber optic infrastructure to rural areas. Despite the moderate affordability, the network subscription rate—a key indicator of Internet adoption—is high compared to regional peers, with 24.5 percent of the population subscribing to fixed broadband and 88 percent of the population subscribing to mobile cellular data.[8] UNDP Digital Household Survey results show that 86 percent of the respondents had access to Internet at work, and 29 percent used free public wireless.

5. There is room to improve Internet quality by upgrading infrastructure, particularly in rural areas. The KODE Project has been instrumental in expanding broadband access to underserved areas, aiming to connect schools and public institutions. Despite the significant success in achieving universal Internet coverage, Kosovo's telecommunications infrastructure still needs upgrades, as Telecom of Kosovo faces capacity challenges that limit further progress. Mobile Internet download speeds in Kosovo rank near the bottom of the distribution among regional peers (Figure 2). To address the Internet quality issue, the Government of Kosovo is actively implementing the National ICT Strategy, which focuses on enhancing digital infrastructure across the country.

6. Higher-income households and more educated individuals tend to engage in more productive online activities, such as pursuing education and supporting their businesses. In contrast, lower-income households and less educated individuals primarily use the Internet for social communication and casual browsing. This disparity in utilization is attributed mainly to the low digital skills among the less educated population, with a notable portion needing help to effectively use digital tools for even basic interactions (Figure 3). According to data from the Kosovo Agency of Statistics, only one-third of the population is familiar with downloading or installing software and copying or moving files on a computer. At the same time, even fewer are proficient in basic office

[5] Internet access refers to the availability of Internet service.

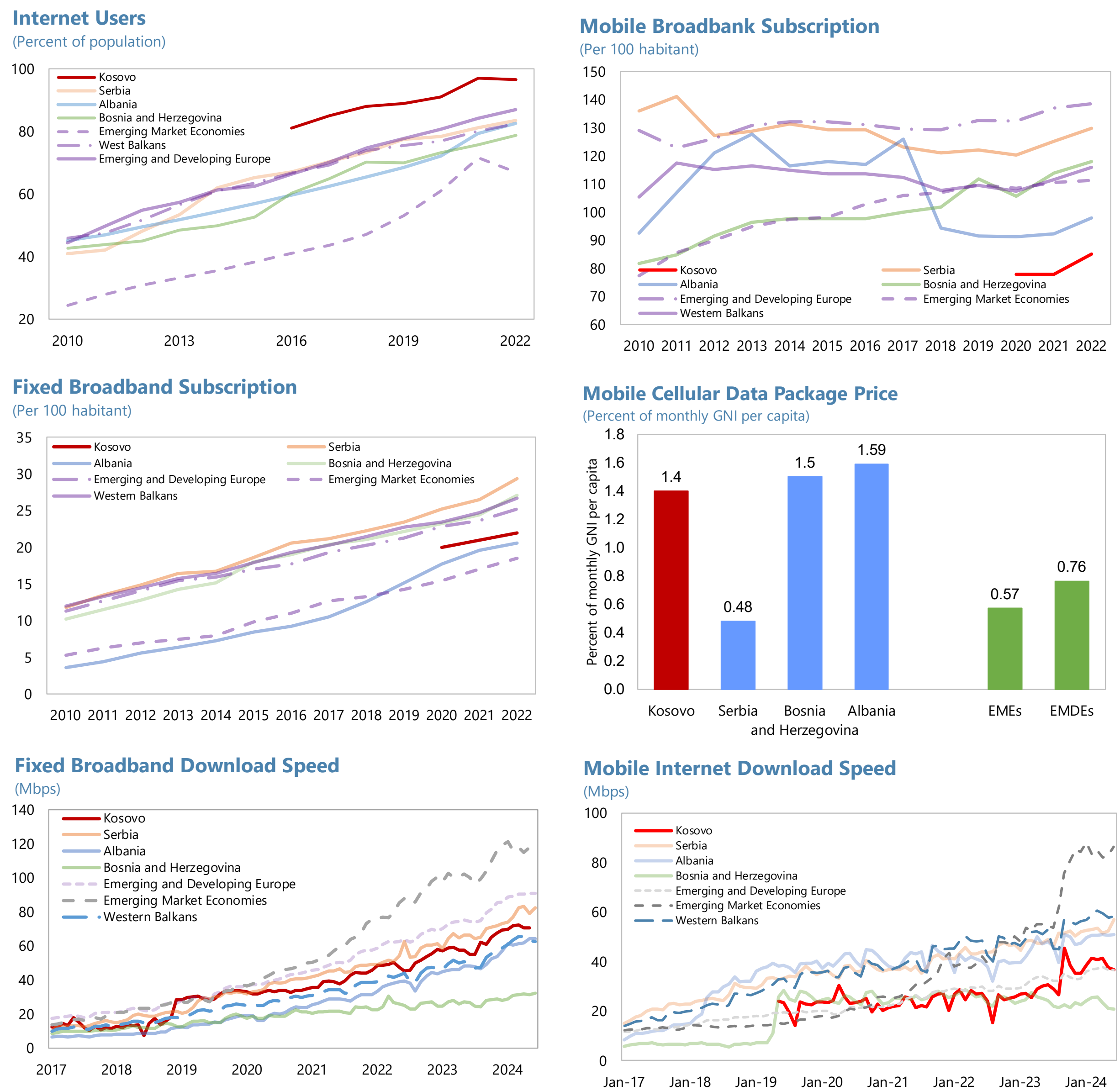
[6] Cf. https://kosovo.mom-gmr.org/en/context/technology/ with additional inputs from officials from Telecom of Kosovo.

[7] By ITU standards of universal and meaningful connectivity, Internet cost below 2 percent of monthly GNI per capita is considered meeting the target.

[8] Data from CIA, 2022 estimates and latest updates from the Regulatory Authority of Electronic and Postal Communications (ARKEP). The broadband subscription rate as a share of households is above 120 percent. Since there is ca. one registered business per five households in Kosovo, all households and businesses have access to fixed broadband Internet.

software. This highlights the urgent need for targeted digital literacy initiatives to empower all population segments to leverage the Internet more effectively.

Figure 2. Kosovo: Internet Accessibility and Affordability



Sources: ITU, Ookla, Kosovo Internet subscription data received from ARKEP, and IMF staff calculations.

Note: Internet users reflect the proportion of individuals using the Internet among the total population or at least individuals of 5 years and older. Population-weighted averages are used for regional/group aggregates.

Figure 3. Kosovo: Percent of Household Respondents Unable to Use Digital Tools, by Region and Gender

Region	Man	Woman	Total
Gjilan	13.41%	25.10%	**19.54%**
Peja	14.06%	16.77%	**14.98%**
Ferizaj	13.28%	11.82%	**12.34%**
Mitrovica	7.50%	15.55%	**12.06%**
Prizren	9.18%	14.66%	**11.44%**
Prishtina	6.29%	10.24%	**8.33%**
Gjakova	4.83%	11.11%	**7.79%**

Source: UNDP Digital Household Survey.

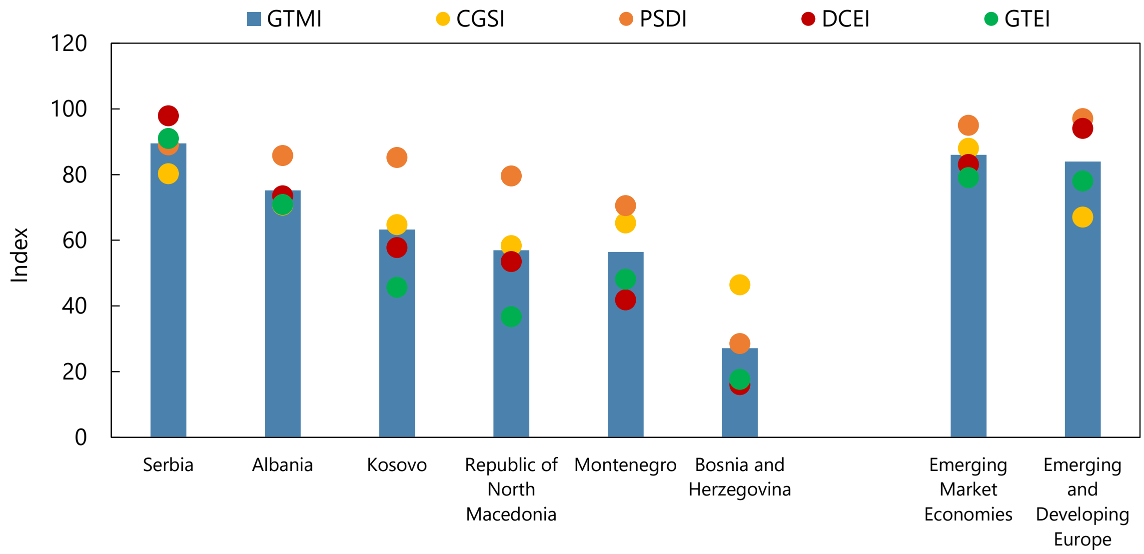
7. **The e-commerce sector in Kosovo remains nascent.** During the Covid-19 pandemic, more companies in Kosovo started experimenting with e-commerce, and commercial banks introduced online banking. Currently, all utilities offer online bill payment options. However, 44 percent of individuals report not knowing online banking platforms, well-known e-commerce websites—like Amazon, Aliexpress, and ASOS—only ship limited goods to Kosovo, and third-party and instant payment methods are unavailable yet in Kosovo. Securing an official, top-level domain for Kosovo will positively impact the economy, data traffic monitoring, and cybersecurity.[9]

C. GovTech Solutions to Modernize Fiscal Operations of Kosovo's Public Administration

8. **Leveraging GovTech to transform public administration is at the core of Kosovo's digitalization strategy.** Kosovo has improved its position in the World Bank's GovTech Maturity Index, moving from group C (*Medium, some focus on GovTech*) to B (*High, significant focus on GovTech*). Kosovo scored 63 (on a scale of 0 to 100) and ranked in the middle among its Western Balkan peers (Figure 4). The country fares better in the Public Service Delivery Index. However, comparison with peers suggests that there is room for Kosovo to strengthen the implementation of its e-government strategy by strengthening GovTech enablers, including digital skills and innovation programs (GovTech Enablers Index), as well as citizen engagement through public participation platforms, citizen feedback, and open government/data portals (Digital Citizen Engagement Index).

[9] UN Security Council Resolution 1244 assigned the unofficial country code top-level domain ".xk" to Kosovo in 1999. See: https://www.cia.gov/the-world-factbook/countries/kosovo/#communications (accessed November 2024). Currently, owners of Kosovo websites must compete on the international domain market to buy web addresses, and government sites are hosted under the ".org" or ".net" domains.

Figure 4. Kosovo: GovTech Maturity Index



Sources: World Bank, https://www.worldbank.org/en/data/interactive/2022/10/21/govtech-maturity-index-gtmi-data-dashboard.

Note: GTMI (GovTech Maturity Index) consists of the average of four components: CGSI (Core Government Systems Index), capturing the key aspects of a whole-of-government approach; PSDI (Public Service Delivery Index), presenting the state of online portals, e-filing services, e-payments; DCEI (Digital Citizen Engagement Index), measuring aspects of public participation platforms, citizen feedback, and open gov/data portals; and GTEI (GovTech Enablers Index), capturing strategy, institutions, and regulations, as well as digital skills and innovation programs. Each component index is calculated as weighted average scores from relevant questions from the Central Government GTMI survey.

i) Revenue Administration

9. **The Tax Administration of Kosovo (TAK) is undergoing significant digital transformation to modernize its revenue collection processes (USAID 2022a, 2022b).** The introduction of mandatory e-filing and e-payment systems in 2022 was pivotal to improving the efficiency of the tax administration framework.[10] The newly developed Taxpayer Portal facilitates online tax declarations, payments, and personal information updates, enhancing taxpayer engagement and compliance. In the ISORA digitalization index, Kosovo performed weakly, with a score of 55.6 out of a maximum of 100.[11]

10. **Despite these efforts, TAK faces substantial challenges related to outdated technology and data infrastructure.** At end-2022, a tax IT modernization contract, signed before the Covid-19 pandemic, was canceled. The current system needs to be improved in scope and functionality, to

[10] Since January 1, 2022, TAK only accepts electronic tax declarations. Taxpayers with no access to Internet can use computers in the regional offices. Taxes must be paid through commercial banks, and funds are electronically transferred from the bank to the Treasury account. Payment details are transmitted to TAK daily.

[11] For reference, in the ISORA digitalization index peer regional countries scored: Albania 64.1, Bosnia and Herzegovina 55.1, Montenegro 31.8, and Serbia 70.2.

fulfill the potential for advanced analytics and real-time tracking of tax compliance. Furthermore, the absence of a data warehouse poses barriers to effective data management and analytics, which are crucial for identifying tax evasion risks. The successful implementation hinges on addressing challenges related to insufficient funding and a limited IT workforce.

11. Ongoing efforts should focus on a step-by-step, comprehensive expansion of the current TAK functionalities to risk management, e-invoicing, and cash management. The TAK digital transformation requires enhancing human resources capacity and securing investments. Adopting a Commercial Off-The-Shelf (COTS) solution could help to align TAK's operations with best practices in digital revenue administration and improve user-friendliness and transparency. Engaging stakeholders in change management efforts and ensuring a cohesive approach will also help implement these recommendations and effectively leverage digital technologies for improved tax compliance and administration efficiency.

ii) Public Finance Management

12. Kosovo has multiple non-integrated systems that support the implementation of its Public Financial Management (PFM) processes. The current PFM landscape includes several systems: (i) the Kosovo Financial Management Information System (KFMIS), based on FreeBalance application, which primarily manages budget execution; (ii) the Public Investment Program (PIP), which captures all investment projects; (iii) the Budget Development Management System (BDMS), used for budget planning; (iv) and the e-Procurement System, which encompasses end-to-end procurement processes (Table 1). Government cash balances are consolidated at the Treasury Single Account (TSA) at the Central Bank of Kosovo (CBK). The TSA has comprehensive coverage through which all budgetary flows related to central and local governments are managed. Government tax and non-tax revenues are swept into the TSA daily without lag between the time of their collection and sweeping to the TSA. Government cash outflows from the TSA are also reconciled daily via the integration between KFMIS and the CBK payment system. Notwithstanding the current system's functionality, there is a tender process—supported by the German development agency GIZ—for a new e-Procurement platform to be delivered in Fall 2025.

13. Despite their legacy value, these information systems often operate in isolation, including specific shortcomings that impact their transparency and accountability. Currently, the reporting of invoices is manual and unreliable, relying on monthly Excel submissions from Budget Organizations (BOs) to the Treasury Department, which is seeking to automate this process to ensure timely tracking of invoices and real-time visibility of unpaid obligations. This initiative would facilitate better arrears control and management. Additionally, the systematic recording of multi-annual contracts is lacking, creating a critical gap in budget planning, as this information is necessary for assessing fiscal space and investment project progress.

Table 1. Kosovo: Information Management Systems Supporting PFM Processes in Kosovo

System	Relevance for PFM	Current Issues & Reforms
Kosovo Financial Management System (KFMIS)	KFMIS is the FreeBalance application for managing and executing the budget within the Treasury. The chart of accounts is embedded within the general ledger within the KFMIS, facilitating budget spending, recording, and reporting. KFMIS is a centralized system used by all BOs. Due to its legal mandate and the broad coverage of financial management systems in Kosovo, MoFLT has access to all financial data from BOs. The asset management module is used to record large assets above EUR 1,000 in value.	KFMIS is generally effective for all budget execution, though functionality for multi-year commitments needs to be added.
Public Investment Program (PIP)	The PIP system is managed by the Budget Department and the IT Department. It comprises an IT system and SQL database into which project managers in BOs can enter data on all investment projects. The interface is easy to work with, and functionality covers the full project cycle. Supporting documents can be uploaded.	All projects are captured in the PIP database, but the information needs to be completed. Hardly any cost-benefit analyses or feasibility documents are being entered. It is more of a data capture tool to produce budget tables. The system needs to be fully utilized as a planning tool.
Budget Development Management System (BDMS)	BDMS is used for budget planning, primarily recurrent expenditures. This custom-made system has been in effect since 2004 and was updated to accommodate the three-year MTEF. BOs submit budget requests using the BDMS.	The Budget Department is working on linking the PIP system and BDMS to KFMIS (managed by the Treasury Department).
E-procurement	The Kosovo Public Procurement Regulatory Commission is responsible for implementing the system. It is a centralized and unified information system. It covers end-to-end procurement processes, starting from procurement planning to payments. It can handle three types of contracts: works, supply, and consultancy services.	Use of the e-procurement system is mandatory for all Contracting Authorities. The Treasury is working on linking KFMIS with the e-procurement system to improve access to information on multi-annual contracts by KFMIS. By linking e-procurement, Treasury is also trying to automate invoice capturing in KFMIS.

Source: 2023 PIMA Update CPIMA report and Stone et al. (2023).

14. The comprehensive reengineering of business processes and the adoption of e-signatures will be critical for the digitalization of PFM. Priorities include adopting a "capture data only once" policy and establishing robust data governance to ensure data quality. Cleaning the PIP data, implementing validation checks, and excluding non-compliant projects from the Medium-Term Expenditure Framework (MTEF) pipeline are essential to improve data integrity (Flynn et al., 2022). A long-term approach to automating the invoicing process is needed, involving business process reengineering and embedding necessary changes during the review of the Law on Public Financial Management and Accountability. Once e-signatures are enabled in Kosovo, the Treasury can begin to eliminate paper-based processing with an ongoing training program for all system users.

iii) Provision of Digital Public Services

15. In 2021, the Government launched e-Kosova, a national public service portal designed to centralize public services and improve accessibility. With nearly a million registered users, the e-Kosova portal initially focused on facilitating vaccine appointments to respond to the immediate demands of the COVID-19 pandemic. The numbers of public participation indicate that the initial take-up was underwhelming. According to Kosovo's statistical agency, only 14.1 percent of citizens used the Internet to access information related to public services, and even fewer (5.3 percent) submitted forms through e-government platforms. Among the 2021 UNDP Digital Household Survey respondents who reported using the e-Kosova platform, most only used it during COVID for vaccination appointments and obtaining vaccination records. Tax services were the second most used in e-Kosova, but only 5 percent of the respondents declared having done it.

16. **Recently, e-Kosova's usage has expanded into other core areas of public service, reflecting its potential to serve as a comprehensive digital resource for citizens** (Figure 5). The platform offers 200 online services (to be expanded to 230 online services by end-2024) to citizens, businesses, and institutions, including emission of civil status documents, utility payments, property taxes, judiciary services, police clearances, and pension benefit administration. The government has recently started implementing the life event approach to service delivery; a pilot is underway to reengineer childbirth-related services by clustering related services from different institutions and reducing parents' interactions with those institutions. There has also been progress in implementing the new National System for Electronic Identification (eID), with a target of 90 percent of the population using digital identities by 2030.

Figure 5. Kosovo: Use of Digital Public Services in e-Kosova Platform

Source: e-Kosova website, https://ekosova.rks-gov.net/.

17. The consolidation of digital systems used in Kosovo's public administration presents an opportunity for improved coordination of fiscal operations and the provision of government services. Different agencies have developed their ICT and data systems without aligning their efforts with the Agency for Information Society (AIS, within the Ministry of Internal Affairs), which has historically been responsible for coordinating the government's digital transformation initiatives. This uncoordinated approach means that citizens often face cumbersome processes that require multiple forms of identification, leading to frustration and reduced trust in government services. An interoperability platform, the Government Gateway (GG), was launched in 2017 to facilitate data exchange among agencies but was slow to gain traction due to technological and coordination limitations. The usage of the interoperability platform accelerated in the last 3 years, with 50 central and local institutions and 48 information systems now connected. Further integrating public services into centralized platforms such as e-Kosova (for service delivery) and GG (for data exchange) will be vital to streamlining processes, enhancing user experience, and encouraging citizens to engage more fully with available digital resources.

D. Social Dividends from Digital Transformation in Health, Education, and Social Safety Nets

18. Digital transformation in Kosovo represents an opportunity to generate social dividends across multiple sectors, including social safety nets, education, employment, and health. The integration of digital tools is expected to facilitate better resource targeting and enhance transparency in service delivery. This section outlines the key policy insights related to these areas, focusing on the benefits and challenges of current digital interventions in social sectors in Kosovo, and reflecting on the necessary steps for sustained progress.

i) Social Safety Nets: Expansion of digital payments and development of management information systems

19. Kosovo is in the early stages of digitizing its social programs through digital governance initiatives. Approximately 600,000 beneficiaries are included in the social registry, with inclusion facilitated via e-Kosova or through social workers. Beneficiaries are verified by social workers and cross-referenced with other datasets to determine eligibility based on income, assets, and proxy means tests. The country has implemented electronic payments in many social welfare programs, including pensions, disability benefits, and the Social Assistance Scheme (SAS). These payments are processed through the Kosovo Pension Savings Trust and other government bodies that have transitioned from manual to digital bank transfers, with funds transferred through the Treasury. This shift has paved the way for a new social assistance payment system, supported by introducing basic accounts in private banks for SAS beneficiaries. Recent efforts have focused on investing in management information systems (MIS) with support from the World Bank. However, these initiatives remain in the early stages. As of May 2024, the pilot MIS for the SAS was partially developed, and the two management systems—the Social Registry Management System (SRMS) and the Social Welfare Information System (SWIS)—had not yet been initiated.

20. Digital inclusion and data security challenges need to be addressed to realize the potential of digitalized social programs. Challenges in fully digitalizing payment systems for social protection stem mainly from the digital divide, as some rural populations still rely on cash payments due to limited access to banking services or digital literacy. The application process to SAS and other programs still depends on in-person contact, as no online or phone systems are available to support this service. Data security and privacy concerns also pose risks, mainly as digital platforms handle sensitive personal information for program eligibility and payments. Strengthening data protection measures and ensuring that beneficiaries' information is securely managed are ongoing priorities for Kosovo's government.

ii) Education: Initiatives to develop digital learning and IT skills starting at early levels of schooling

21. The government has made significant strides in digitalizing education, particularly following the approval of the Kosovo Education Strategic Plan 2022–26. This strategy has five main pillars, one of which is integrating digital technology to enhance both the quality and accessibility of education. Key initiatives include expanding the availability of digital tools in classrooms and improving digital literacy among educators and students. This effort aligns with one of the objectives of DAK 2030, which is to include basic IT skills and advanced competencies in areas like coding, data analysis, and cybersecurity. Another priority of DAK 2030 is ensuring that all schools across Kosovo have access to high-speed Internet and modern digital tools, which could help address access and quality issues, particularly in remote areas with limited educational resources. Currently, all 750 and about 400 ancillary establishments are in some way connected to the Internet, but most have poor quality or partial coverage. Under the World Bank KODE Project,[12] 100 schools are connected to high-speed Internet. Under a follow-up project, high-speed Internet will be extended to 120 additional schools by the end of 2024.

22. Kosovo is actively pursuing the development of workforce digital skills through comprehensive initiatives outlined in the e-Government Strategy and the DAK 2030. The fourth strategic objective of the DAK 2030 emphasizes creating a "digital skilled population and innovative R&D ecosystem," supported by five specific objectives and 19 indicative activities aimed at enhancing digital competencies among citizens. Key initiatives include providing free online training for e-commerce and e-government services, revising ICT programs in universities to focus on innovative technologies, stimulating projects aiming at high inclusion of women in ICT and online work, and investing in professional practice programs on IT skills for students at vocational schools.[13] Additionally, scholarships have been provided, particularly to encourage female students to enter STEM fields.

[12] See: World Bank (2023a) and https://projects.worldbank.org/en/projects-operations/project-detail/P164188 (accessed November 2024).

[13] See, e.g., vocational ICT activities sponsored by the Central Bank of Kosovo aimed at increasing digital financial literacy: https://bqk-kos.org/edu/en/summary-of-activities-for-gmw-2024/.

iii) Health: Integrating information systems to inform policy decisions and the enhance efficiency of service delivery

23. Kosovo's health information system needs to be more cohesive, with different independent systems that do not effectively communicate with each other. The Basic Health Information System (BHIS), used in some primary healthcare (PHC) centers, has limited functionality, and needs to be uniformly implemented across all facilities. According to the World Bank (2024), as of March 2024, only a third of PHC facilities were estimated to have a fully functional BHIS, with less than 12 percent of visits registered in the system. While it has evolved from a basic patient registration tool to include some tracking of medical history, its lack of integration with other critical systems (such as the e-prescription service, laboratory information systems, and the Health Insurance Fund information system) prevents the seamless flow of medical records across different levels of care. The Kosovo eHealth Feasibility Study highlights that only a few systems communicate with the BHIS, such as the public health surveillance system[14] and pharmaceutical stock management system. This fragmentation makes it difficult to track patient diagnoses, procedures, and outcomes, leading to inefficiencies in care coordination and limited data for assessing the quality of care. Significant gaps remain, particularly at the hospital level, where the absence of integrated hospital management systems further complicates the collection and analysis of patient-level data. This lack of real-time, comprehensive health data severely restricts Kosovo's ability to monitor health outcomes, respond to public health crises, and ensure high-quality healthcare delivery.

24. Significant investments are planned to support digital transformation in the health sector, aiming to improve health service delivery, support clinical decision-making, and enhance health system management and policy formulation. Currently, all 38 large primary and ca. 60 percent of district (medium-size) healthcare centers are connected to the BHIS; however, 475 health ambulatories remain to be connected to the BHIS. The system aims at an integrated health information system based on Gigabit connectivity, targeting generalized access to e-records by citizens by 2030. The World Bank's KOMPAS project will help roll out the IHIS and expand the coverage and functionalities of systems like BHIS, including e-referrals and appointments. The project also plans to introduce a Hospital Management Information System for all regional hospitals and improve data analytics at the National Institute of Public Health by developing a central data warehouse.

E. Fostering Governance and Institutional Capacities to Develop the Potential of GovTech Adoption in Kosovo

25. Higher-level coordination of national digitalization policies is crucial, with the Ministry of Interior responsible for developing interoperability frameworks and data governance policies. Empowering the AIS provides an opportunity to reevaluate core ICT systems. At the same time, DAK 2030 emphasizes the need for enhanced e-government services, digital skills

[14] The health surveillance system monitors the spread of diseases and infections, e.g., in the case of public health emergencies (https://www.who.int/emergencies/surveillance).

development, and public-private partnerships to promote comprehensive digital transformation. A central component of these initiatives is the development of a comprehensive National Interoperability Framework, supported by the expansion of the Government Gateway platform to facilitate seamless data sharing between various government organizations. Developing national interoperability standards in line with the e-Government Strategy 2023–2027 and the European Interoperability Framework is essential for creating a cohesive digital ecosystem in the public sector. These standards will facilitate seamless data exchange between government entities, enabling integrated service delivery through platforms like the e-Kosova portal.

26. As Kosovo advances its digital transformation agenda, implementing strong cybersecurity measures will be essential in mitigating risks and enabling the success of e-government initiatives. With the growing use of digital platforms, the country is increasingly exposed to cyber threats. Only a few key agencies have adopted effective practices after identifying cyber threats. The national cyber-incident response unit suffers from severe personnel shortages and low incident report volumes, suggesting a lack of capacity to detect issues. Kosovo has begun to address this issue with its National Cyber Security Strategy (2023–2027), which includes creating a cybersecurity agency and enhancing cyber incident response capabilities. The strategy outlines a comprehensive framework to strengthen the resilience of digital infrastructures against various cyber threats, including internal attacks and organized cybercrime. This strategy aligns with the e-Government Strategy and the DAK 2030, both of which emphasize the need for secure digital environments to facilitate efficient governance, safeguard sensitive information, and protect the integrity of financial transactions.

27. Kosovo’s commitment to digitalization is reinforced through collaboration with international organizations. For instance, the World Bank's Kosovo Strengthening Digital Governance for Service Delivery project aims to improve the efficiency and accessibility of government services by modernizing digital infrastructure and enhancing data management practices. The European Union ensures Kosovo’s digital initiatives comply with EU regulations, facilitating access to best practices and technologies. Similarly, USAID enhances the skills of public officials through capacity-building programs, fostering an environment conducive to innovation and effective governance. The World Bank also assists in establishing core management information systems in key sectors like healthcare and social safety nets. In the specific case of the IMF, it supports the authorities in improving fiscal operations by designing a data warehouse for TAK and assessing the readiness of PFM systems to move closer toward digitalization of invoicing processes and integrating other technologies. Moreover, by actively participating in initiatives such as the Horizon Europe program and collaborating with organizations like UNICEF, Kosovo aims to adopt best practices and globally competitive digital policies.

28. Kosovo's e-Government Strategy 2023–2027 and DAK 2030 also highlight the importance of strategic partnerships with the private sector to drive digital transformation and enhance public service delivery. Collaborations with local and international tech companies are essential for integrating innovative technologies into government operations. For instance, partnerships with local IT firms aim to develop customized e-government solutions that streamline service delivery and enhance user experiences through platforms such as e-Kosova. The government is also exploring public-private partnerships to invest in digital infrastructure, particularly expanding broadband access and improving cybersecurity measures. DAK 2030 emphasizes fostering an entrepreneurial ecosystem by collaborating with private sector stakeholders to promote research and development in innovative technologies. Initiatives such as hackathons and innovation challenges are being organized in collaboration with private companies to encourage young entrepreneurs and developers to contribute to digital solutions for public services.

F. Conclusions and Policy Recommendations

29. Kosovo's digital transformation initiatives have made substantial progress in reshaping fiscal operations and enhancing service delivery. Implementing the e-Government Strategy 2023–2027 reflects a strong commitment to improving digital infrastructure and increasing citizen engagement. However, challenges such as digital usage, poorly coordinated development, outdated and fragmented platforms, operational processes based on manual interactions, and cybersecurity risks hinder the full potential of these initiatives. To accelerate digital adoption and maximize its benefits, Kosovo should prioritize the following policies:

- **Invest in underserved areas:** The KODE project has been vital in expanding access to high-speed broadband in rural areas, and the government is also collaborating with the World Bank to assess Internet penetration and service quality metrics. Regularly monitoring connectivity indicators is crucial to ensuring that underserved regions receive adequate infrastructure.

- **Ensure a coordinated approach to digital transformation:** The e-Government Strategy 2023–2027 outlines a framework for digital governance, focusing on integrating services across government agencies. The e-government strategy emphasizes the need for a "whole-of-government" approach to improve the interoperability of digital systems used in public administration. Entrusting DTU and AIS with a clear mandate and resources and implementing the National Interoperability Framework will ensure alignment with broader governance goals. Concurrently, securing a top-level domain for Kosovo remains a priority because it will positively impact the economy, improve data traffic monitoring, and enhance cybersecurity.

- **Modernize tax and PFM systems to promote efficiency, compliance, and transparency:** The development of e-filing and e-payment systems has been key to taxpayer engagement, yet challenges persist due to outdated technology and the lack of a data warehouse. Streamlining business processes and addressing data integrity and isolation in PFM systems are also critical.

- **Establish robust cybersecurity measures and protocols to protect sensitive data and build public trust in digital platforms:** Kosovo has developed a National Cybersecurity Strategy to address potential cyber threats. Regular cybersecurity assessments and training programs for public servants will enhance their cyber-risks mitigating capabilities.

- **Implement targeted digital literacy programs:** By launching initiatives to boost digital skills, especially for vulnerable groups, citizens will be better equipped to utilize e-government services, leading to greater participation and engagement. Expanding digital training initiatives and vocational training IT programs and ensuring they align with labor market needs will prepare a workforce equipped for the demands of an increasingly digitalized economy.

- **Consider Internet subsidies to increase mobile subscription rates:** Assuming a price elasticity of minus 1, increasing the mobile data subscription rate from 88 to 100 percent would require targeted subsidies equal to 0.02 percent of GDP,[15] which is accommodable within the existing fiscal space. Internet subsidies could be transferred to the supply side (i.e., carriers and operators) or the demand side (i.e., users), through direct transfers or indirect benefits, e.g., lower fees and taxes (Amaglobeli et al., 2023).

- **Trace and publish regularly key performance indicators (KPIs):** Evaluating the effectiveness of digitalization initiatives in Kosovo requires selecting KPIs that accurately reflect progress, impact, and areas needing improvement.

[15] A price elasticity (ε) of minus 1 means that for each percentage point decrease in price, the subscription rate increases by 1 percent. The targeted subsidies for mobile data are calculated as the targeted population (i.e., the gap between the current and the total aimed population with paid subscriptions, ΔQ) times the price drop (ΔP) required to increase the total aimed subscription rate, where $\Delta P = \Delta Q/Q \times P/\varepsilon$. I.e., the targeted subsidies equal:

$$\text{Mobile data targeted subsidies} = (1 - .88) \times (1 - .88)/.88 \times .014\ \text{GNI}/(-1) = .00023\ \text{GNI}$$

Given that the average GNP/GDP ratio for the past 15 years equals 1.019, the targeted subsidies for mobile data equal to 0.02 percent of GDP.

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