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HEALTH FINANCING SYSTEMS: THE WESTERN BALKANS CASE

Vasilevska H.[1], Stojchevska M.[2], Tozija F.[2]

[1]*Public Health Center, Bitola, Republic of North Macedonia*

[2]*Faculty of Medicine, Ss. Cyril and Methodius University, Skopje, Republic of North Macedonia*

Abstract

Objective: Reforms introduced in the 1990s aimed at sustainability amidst high out-of-pocket costs and low public funding. Over the past three decades, the Western Balkans (WB) countries have undergone profound transformations. The aspiration to join the European Union (EU) strongly shapes health financing policies in the Western Balkans, encouraging reforms focused on equity, efficiency, and financial sustainability. The aim of this paper is to analyze and compare health expenditure levels and financing structures across Western Balkan countries.

Materials and Methods: The analysis is based on data from the World Health Organization HFA-DB and the World Bank, supplemented by Health in Action reports for the selected countries. Public health approach has been applied.

Results: In 2023, health expenditure ranged from 7% of GDP in Albania to 9.7% in Montenegro. Despite this growth, per capita spending remains substantially below EU levels

(US$4,153), with Albania reporting the lowest (US$590) and Montenegro the highest (US$1,147). A common regional challenge is the high reliance on out-of-pocket (OOP) payments, exceeding 30% in most countries and reaching over 40% in Albania and North Macedonia, well above the EU average (14,8%).

Conclusion: Health financing systems in the Western Balkans show increasing expenditure but continue to face limited financial protection and persistent inequities. High reliance on out-of-pocket payments and unmet healthcare needs continue to expose populations to financial risk, particularly among lower-income groups. Strengthening public financing, improving risk pooling, and enhancing system efficiency are essential to accelerate progress toward universal health coverage in the region.

Keywords: *efficiency; health financing systems; Western Balkans.*

Introduction

Health care financing is a function of the health system that mobilizes, accumulates, and allocates financial resources to cover the health needs of people, individually and collectively (1). At its core, health financing constitutes a simple but integral function of a health system: raising and spending money on health care (2).

Health expenditure constitutes a major policy concern for economies worldwide, placing significant pressure on public budgets while reflecting governments' investment in the health and well-being of their populations. These challenges are especially acute in the Balkan region, where countries continue to face the combined effects of the global economic downturn over the past decade and the enduring socioeconomic consequences of past conflicts (3).

The health system traces its infrastructure and organization to the period when the countries were part of former Yugoslavia. Most Western Balkan countries operate under a Bismarck-type social health insurance system, characterized by social health insurance and universal coverage principles. This model emphasized universal coverage, solidarity, and public provision of services. However, the economic and political transitions of the 1990s led to structural reforms aimed at decentralization, cost containment, and system sustainability (4). Although Albania was not part of Yugoslavia, its healthcare system, similar to those in other former communist countries of Central and Eastern Europe (CEE), is based on the Soviet "Semashko" model. The legacies of the Semashko system remain visible, especially in the state ownership of public healthcare institutions, the public provision of services, and funding from the general tax base (especially for secondary and tertiary care) (5).

After an initial phase focused on macroeconomic stabilization and reconstruction, reforms are now focusing on enhancing economic growth, promoting employment, and encouraging the containment and efficiency of public spending (6).

The shared aspiration of the Western Balkan countries to join the European Union (EU) significantly shapes their policy decisions. In particular, the EU integration process influences health financing reforms by encouraging alignment with key principles such as equity, efficiency, transparency, and financial sustainability. This includes reducing out-of-pocket payments, improving resource allocation, and strengthening financial management systems (7).

Despite these efforts, the region faces persistent challenges, including limited fiscal space, demographic pressures, and high out-of-pocket payments. Understanding financing patterns and expenditure trends is essential for improving system performance and achieving

universal health coverage. The aim of this paper is to analyze and compare health expenditure levels and financing structures across Western Balkan countries.

Materials and Methods

The analysis is based on data from the World Health Organization HFA-DB and the World Bank, supplemented by Health in Action reports for the selected countries. Public health approach has been applied.

Results

Health expenditure has increased steadily across the region, both as a share of GDP and in absolute terms. However, this growth is driven largely by rising demand, aging populations, and increased costs rather than systemic improvements.

Gross domestic product (GDP) as an economic indicator which measures the economic power of a country, is an important indicator of the financial state of one country and is a way to compare countries with each other.

Health expenditure (% of GDP) among observed countries was highest in Montenegro with 9.7% and lowest in Albania with 7% in 2023. (Figure 1) (Table 1) (9)

Table 1: Health expenditure (% of GDP) for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia and Serbia (2019 - 2023)

Countries	2019	2020	2021	2022	2023
Albania	6,8	7,5	7,4	7,5	7
Bosnia and Herzegovina	8,9	9,7	9,6	8,7	8,9
Montenegro	8,3	11,4	10,6	10,2	9,7
North Macedonia	7,1	7,7	8,4	7,4	7,4
Serbia	8,3	8,3	9,2	8,6	8,0
European Union	9,8	10,8	10,8	10,3	10

Source: Global Health Expenditure Database, updated December 12th, 2025, World Health Organization (WHO), uri: apps.who.int/nha/database (9)

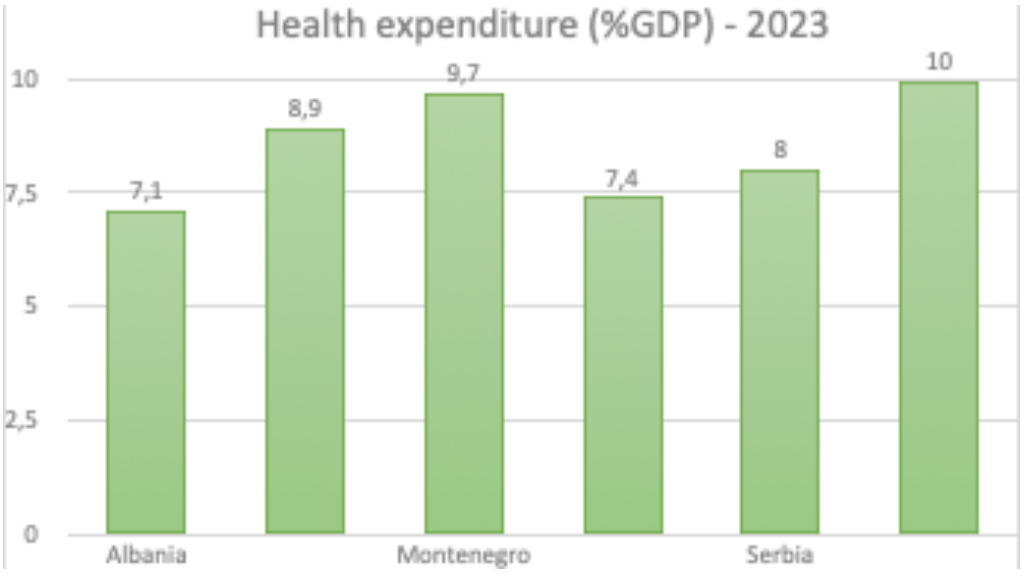


Figure 1: Health expenditure (% GDP) for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and European Union (2023)

Source: Global Health Expenditure Database, updated December 12th, 2025, World Health Organization (WHO), uri: apps.who.int/nha/database (9)

In 2023 in Albania, per capita health spending remained the lowest among Western Balkan countries, standing at US$590,6, despite a gradual increase over the past decade. (Figure 2) (10)

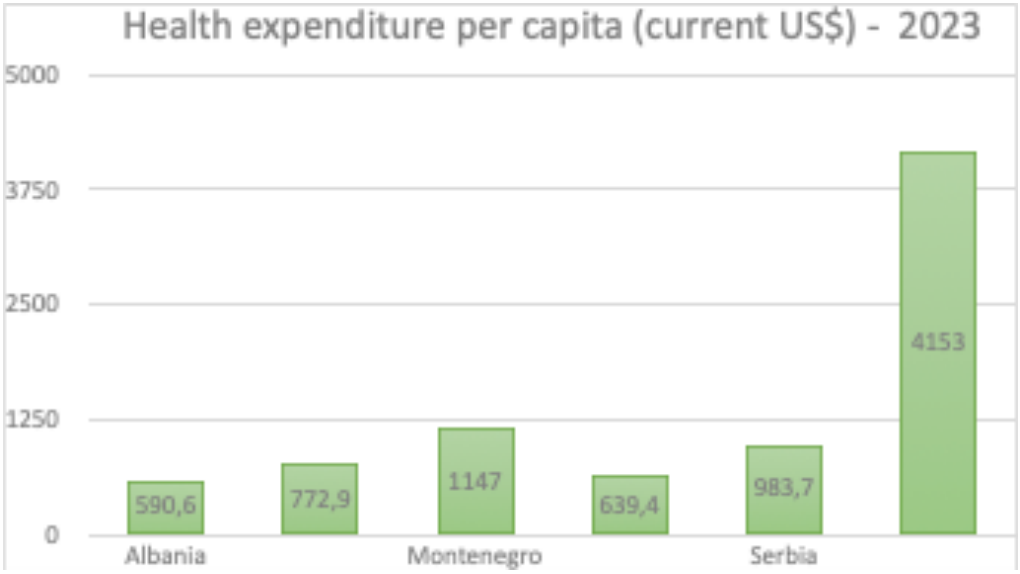


Figure 2: Health expenditure per capita (current US$) for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and European Union (2023).

Source: Global Health Expenditure Database, updated December 12th, 2025, World Health Organization (WHO), uri: apps.who.int/nha/database (10)

Out-of-pocket (OOP) payments represent a substantial share of total health expenditure, accounting for 48.3% in 2023, significantly above the European Union (EU) average of 14.8%. (Figure 3) (11) These expenditures are primarily driven by outpatient medicines, informal payments, and the use of private healthcare services. As a result, financial protection remains limited, with more than 12% of households experiencing catastrophic health expenditure, disproportionately affecting lower-income groups.

Bosnia and Herzegovina allocated 9.6% of its GDP to health expenditure in 2021, with this share decreasing to 8.9% in 2023. (Figure 1) (Table 1) (9) Health expenditure per capita (current US$) in 2023 is lower than (772.9) compared to the European Union (EU) (4,153) (Figure 2) (10). Financial protection remains a concern, with catastrophic health spending disproportionately affecting lower-income households. This is largely driven by out-of-pocket (OOP) payments, particularly for outpatient medicines, which accounted for 30.9% of total health expenditure in 2023. (Figure 3) (11)

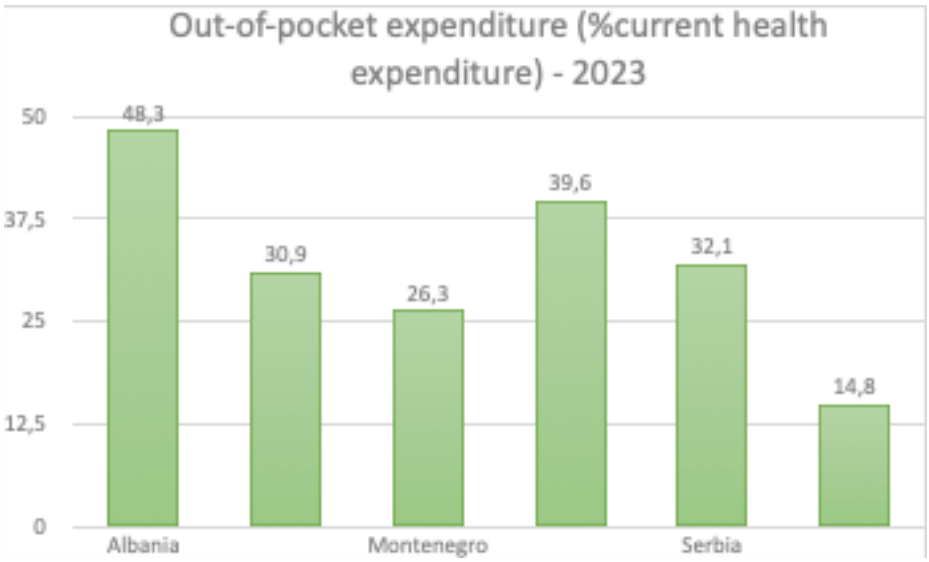


Figure 3: Out-of-pocket expenditure (% of current health expenditure) for Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia and European Union (2023). Source: Global Health Expenditure Database, updated December 12th, 2025, World Health Organization (WHO), uri: apps.who.int/nha/database (11)

Public health expenditure in Montenegro increased markedly during the COVID-19 pandemic, reaching 10.6% of the gross domestic product (GDP) in 2021, before declining to 9.7% in 2023. (Figure 1) (Table 1) (9) In the same year, health expenditure per capita was amounted to US$1,147, the highest in the region. (Figure 2) (10) Out-of-pocket (OOP) payments represented approximately 38% of health expenditure in 2021, largely driven by spending on non-reimbursed medicines and private services, often chosen to avoid waiting

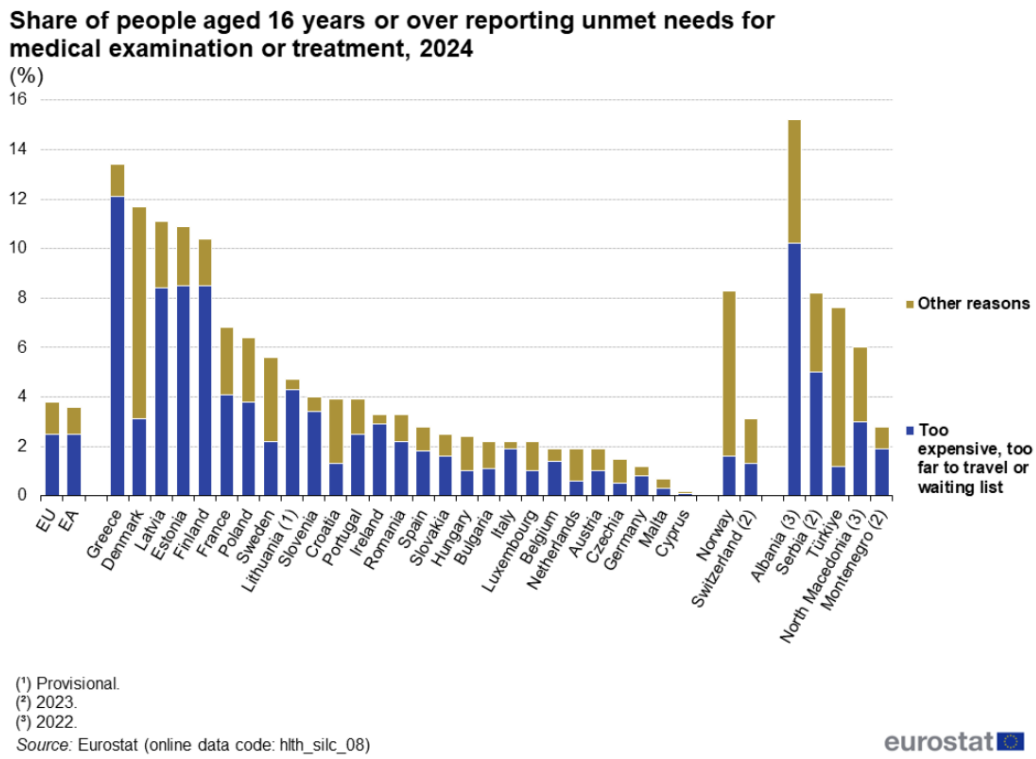
times. Although the share of OOP spending fluctuated from 2011 to 2021, it remained consistently high before dropping notably to 26.3% in 2023. (Figure 3) (11)

North Macedonia's health expenditure increased from 7.1% of GDP in 2019 to 8.4% in 2021, following a trend observed across Europe during the COVID-19 pandemic, before declining to 7.4% in 2023. (Figure 1) (Table 1) (14) Health expenditure per capita (current US$) in 2023 for North Macedonia is relatively low (639.4) in comparison to the European Union (4,153). (Figure 2) (10) OOP payments account for over 40% of total health spending. Despite increases in public spending on health, OOP spending accounted for 39.6% of health spending in 2023, which was far above the average of EU countries (14.8%). (Figure 3) (11)

Health expenditure in Serbia reached a peak of 9.2% of gross domestic product (GDP) in 2021, primarily due to economic contraction and heightened emergency spending during the COVID-19 pandemic, before declining to 8% in 2023. (Figure 1) (Table 1) (9) In the same year, health expenditure per capita amounted to US$983.7, well below the European Union (EU) average of US$4,153. (Figure 2) (10) The system remains heavily reliant on out-of-pocket (OOP) payments, which account for the majority of private health spending. OOP payments as a share of health expenditure nearly doubled from 2002 to 2017, then eased after 2018 but remained elevated, standing at 32.1% in 2023, compared to the EU average of 14.8%. (Figure 3) (11)

According to 2024 data from Eurostat, Albania reported the highest percentage of unmet healthcare needs (15%), followed by Serbia (8%), North Macedonia (6%), and Montenegro (3%). (Figure 4) (14) Unmet healthcare needs remain a significant equity and access challenge in the Western Balkans, particularly among low-income populations.

Figure 4: Share of people aged 16 years or over reporting unmet needs for medical examination or treatment, 2024 (%)



Source: Eurostat, 2024 (hlth_silc_08) (14)

According to WHO "Health Systems in Action" reports, Western Balkan countries continue to experience barriers to timely access to healthcare services, despite relatively high levels

of formal insurance coverage in some systems. WHO analyses across the region consistently highlight that financial barriers are the main driver of unmet healthcare needs, with low-income groups being disproportionately affected. High reliance on out-of-pocket payments increases the likelihood that individuals will delay or forgo necessary care, particularly medicines and specialist services. In North Macedonia, for example, more than 90% of the population is covered by social health insurance, yet unmet need persists, especially among poorer households due to cost-related barriers and high out-of-pocket payments for outpatient medicines and specialist care (14).

Discussion

Albania's health system is financed through a combination of compulsory health insurance contributions from employees and employers, supplemented by allocations from the state budget. The Compulsory Health Insurance Fund (ISKSH) pools these resources and finances publicly provided healthcare services, reimburses insured individuals for prescription medicines, and contracts selected services from private providers (8).

In Bosnia and Herzegovina, due to the organization of the state itself, the financing of healthcare providers is different and more complex. There is no centralized health insurance, so healthcare providers sign contracts and are paid by a specific Fund to which the insured are registered depending on where they live. In the Federation of Bosnia and Herzegovina, the insured of the respective cantonal Health Insurance Fund can receive publicly paid primary and secondary services only from that canton's contracted cantonal providers, and not from providers from other cantons of the Federation of Bosnia and Herzegovina. In the Republika Srpska and the Brčko District of Bosnia and Herzegovina, the insured can receive publicly paid health services from contracted providers in the whole entity/district. The

Federation of Bosnia and Herzegovina established a minimum services package that has to be provided in all cantons, in addition to a list of complex services and expensive medicines that are financed by the Federation's Health Insurance and Reinsurance Fund (12).

Montenegro's health system is highly centralized, with the Ministry of Health responsible for governance, regulation, and administration, while the Health Insurance Fund (HIF) serves as the sole public purchaser of health services. In 2022, under the Montenegro Economic Reform Programme 2022-2024 and the "Europe Now" initiative, the financing model transitioned from a contribution-based social health insurance system to a fully tax-funded system (13). This reform aimed to enhance labour market competitiveness and reduce informality.

North Macedonia's health system is largely financed through a social health insurance scheme operated by a single-payer Health Insurance Fund (HIF) that acts as the main purchaser of publicly funded health services (14).

Serbia's principal purchaser of publicly financed health services is the National Health Insurance Fund (NHIF), predominantly funded through payroll contributions (15).

Health expenditure remains a central concern in public policy across countries, as it consumes a significant share of government budgets while also serving as an indicator of state investment in population health and welfare. In the Western Balkans, this challenge is even more evident, largely due to the lingering effects of the global financial crisis over the past decade and the persistent socioeconomic repercussions of earlier conflicts in the region (16).

Despite convergence in expenditure growth, substantial cross-country disparities persist. Montenegro reports the highest THE as a share of GDP and per capita spending, reflecting recent financing reforms and increased fiscal commitment. In contrast, Albania remains at

the lower end of both relative and absolute spending, indicating constrained fiscal capacity. Across North Macedonia, Serbia, and Bosnia and Herzegovina, per capita expenditure remains significantly below European Union levels, highlighting persistent resource gaps. This supports earlier findings that relatively high GDP shares may mask low absolute investment due to limited economic capacity (17).

A defining structural feature of the region is the persistently high reliance on out-of-pocket (OOP) payments. Medicines remain the principal driver of OOP expenditure, with inadequate coverage and pricing inefficiencies limiting affordability. Complementary evidence shows that while essential medicines are generally available, access varies significantly across countries, as well as prescribing restrictions, particularly in primary care, where cost may increase and reduce system efficiency.

The case of North Macedonia illustrates both the problem and potential policy response. WHO evidence shows that limited coverage of outpatient medicines has been a major driver of financial hardship, while the recent expansion of the positive medicines list has improved affordability and treatment adherence (18).

High OOP spending has important implications for equity, as it is strongly associated with catastrophic and impoverishing health expenditure (19).

This is particularly evident in Albania and Bosnia and Herzegovina, where financial protection remains weak despite formal coverage arrangements. Fragmented financing structures, especially in Bosnia and Herzegovina, further exacerbate inequities by limiting risk pooling and creating disparities in access across administrative units.

Consequently, a considerable share of households experiences financial hardship and catastrophic health expenditure, highlighting ongoing inequities in access to essential health services.

Policy efforts in the Western Balkans should prioritize strengthening public financing mechanisms, expanding benefit coverage, improving purchasing efficiency, and reducing reliance on out-of-pocket payments to enhance equity, financial protection, and system sustainability. Institutional arrangements play a critical role in shaping these outcomes. Centralized systems, such as those in Montenegro and North Macedonia, may facilitate coordinated purchasing but do not necessarily reduce financial barriers.

Conversely, decentralized systems introduce inefficiencies and inequities due to fragmentation.

Transitioning from contribution-based to tax-funded models, as observed in Montenegro, may improve equity in principle, while international evidence suggests that financing reforms alone are insufficient without parallel improvements in benefit design and purchasing efficiency. Although various reforms have been introduced, including adjustments to financing models and incremental increases in public spending, these efforts have not yet resulted in substantial reductions in OOP expenditures or significant improvements in financial protection (20).

Conclusion

Health expenditure in the Western Balkan region reflects a complex interplay of economic capacity, demographic pressures, and ongoing health system reforms. Although health spending has increased gradually in recent years, the region continues to lag behind European Union averages in both total and per capita health expenditure.

Substantial disparities persist across countries, with Albania consistently recording the lowest and Montenegro the highest levels of health spending.

Across the region, health systems continue to be characterized by limited financial protection and a persistently high reliance on out-of-pocket payments, which remain significantly above EU levels. This high level of direct payment at the point of service contributes to unmet healthcare needs, particularly among low-income and other vulnerable population groups. Overall, the findings suggest that increasing health expenditure alone is insufficient to achieve universal health coverage objectives. Sustainable progress in the Western Balkans will depend not only on increasing health expenditure but also on ensuring that available resources are used more effectively to achieve better health outcomes and greater system resilience.

Declarations

Ethics approval and consent to participate: Not applicable.

Informed consent: Not applicable.

Conflict of interest: The authors declare no conflict of interest.

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Availability of data and materials: Data used in this study are publicly available from the World Bank, WHO HFA-DB, Eurostat.

Authors' contribution: H.V: literature review, writing, analysis, editing;

M.S: analysis, editing; F.T: supervision

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References:

1. Tozija F. Function 2: Financing of the health system. In Editors: Spasovski M, Tozija F, Kjosevska E. Introduction to medicine. Skopje: Faculty of Medicine; 2022.
2. Cylus J, Sallaku J, Jowett M. Health system performance assessment: a framework for policy analysis. Available from: https://www.ncbi.nlm.nih.gov/books/NBK590186/
3. Jevtic M. Health policy considerations in the Western Balkans. Western Balkans Info Hub; 2025. Available from: https://westernbalkans-infohub.eu/wp-content/uploads/2025/07/Policy-Report_Health-Policies_Western-Balkans_final.pdf
4. Organisation for Economic Co-operation and Development. Government at a glance: Western Balkans. Paris: OECD; 2020. Available from: https://doi.org/10.1787/a8c72f1b-en
5. Tomini SM, Groot W, Pavlova M. Paying out-of-pocket and informally for health care in Albania: the impoverishing effect on households. Front Public Health.2015;3:207. Available from: https://doi.org/10.3389/fpubh.2015.00207
6. Bredenkamp C, Gragnolati M. Sustainability of healthcare financing in the Western Balkans: an overview of progress and challenges. Washington (DC): World Bank; 2007. Available from: http://hdl.handle.net/10986/7377
7. World Health Organization Regional Office for Europe. Roadmap for health and well-being in the Western Balkans (2021–2025): European Programme of Work (2020–2025) – United Action for Better Health. Copenhagen: WHO Regional Office for Europe; 2021. Available from: https://www.who.int/europe/publications/i/item/WHO-EURO-2021-3435-43194-60508

8. International Trade Administration. Healthcare resource guide: Albania. Washington (DC): U.S. Department of Commerce; 2021. Available from: https://www.trade.gov/healthcare-resource-guide-albania
9. World Bank. Current health expenditure (% of GDP). World Development Indicators. Available from: https://data.worldbank.org/indicator/SH.XPD.CHEX.GD.ZS
10. World Bank. Current health expenditure per capita (current US$). World Development Indicators. Available from: https://data.worldbank.org/indicator/SH.XPD.CHEX.PC.CD
11. World Bank. Out-of-pocket expenditure (% of current health expenditure). World Development Indicators. Available from: https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS
12. European Observatory on Health Systems and Policies, WHO Regional Office for Europe. Health systems in action: Bosnia and Herzegovina 2024. Available from: https://eurohealthobservatory.who.int/publications/i/health-systems-in-action-bosnia-and-herzegovina
13. European Observatory on Health Systems and Policies, WHO Regional Office for Europe. Health systems in action: Montenegro 2024. Available from: https://eurohealthobservatory.who.int/docs/librariesprovider3/publicationsnew/montenegro---hsia-one-pager.pdf
14. European Observatory on Health Systems and Policies, WHO Regional Office for Europe. Health systems in action: North Macedonia 2024. Available from: https://eurohealthobservatory.who.int/docs/librariesprovider3/publicationsnew/north-macedonia---hsia-one-pager.pdf

15. European Observatory on Health Systems and Policies, WHO Regional Office for Europe. Health systems in action: Serbia 2024. Available from: https://eurohealthobservatory.who.int/docs/librariesprovider3/publicationsnew/serbia---hsia-one-pager.pdf
16. Rancic N, Kovacevic A, Dragojevic-Simic V. Long-term health expenditure changes in selected Balkan countries. Front Public Health.2015;3:152. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC4450573/
17. Thomson S, Cylus J, Evetovits T. Can people afford to pay for health care? New evidence on financial protection in Europe. *Health Policy Plan* [Internet]. 2010 [cited 2026 Apr 27];25(6):430–437. Available from: https://doi.org/10.1093/heapol/czq070
18. World Health Organization. From evidence to action: improving affordable access to medicines in the Western Balkans. Available from: https://www.who.int/europe/news-room/feature-stories/item/from-evidence-to-action--improving-affordable-access-to-medicines-in-the-western-balkans
19. Saksena P, Xu K, Durairaj V. The drivers of catastrophic expenditure: outpatient services, hospitalization or medicines? *World Health Report Background Paper*. Geneva: World Health Organization; 2010;21. Available from: https://cdn.who.int/media/docs/default-source/health-financing/technical-briefs-background-papers/21whr-bp.pdf
20. Kutzin J. Health financing for universal coverage and health system performance: concepts and implications for policy. *Bull World Health Organ*. 2013;91(8):602–611. Available from: https://doi.org/10.2471/BLT.12.113985