

Decentralized But Not Equal



Gender Disparities
in Digital Finance
across the South Caucasus
and Moldova

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Acronyms and Abbreviations

AIR	Alliance for Innovative Regulation
AML	Anti-Money Laundering
AWIC	Association for Women in Cryptocurrency
BTC	Bitcoin
BEM	Beyond Europe with Micro-credentials
CBA	Central Bank of Azerbaijan
CBDs	Central Bank Digital Currencies
CFT	Countering the Financing of Terrorism
CSAO	Central & Southern Asia and Oceania (region)
CSW68	68th session of the Commission on the Status of Women
DAAD	Deutscher Akademischer Austauschdienst (German Academic Exchange Service)
DeFi	Decentralized Finance
DEI	Diversity, Equity and Inclusion
EBRD	European Bank for Reconstruction and Development
ECAPI	Eastern Europe and Central Asia Policy Initiative
EGFIP	Expert Group on Financial Inclusion Policy
EIOPA	European Insurance and Occupational Pensions Authority
ESG	Environmental, Social and Governance
ETH	Ethereum
EU	European Union
FAO	Food and Agriculture Organization
FATF	Financial Action Task Force
FIA	Fintech Association of Georgia
FLEC	Financial Literacy and Education Commission
FSB	Financial Stability Board
GITA	Georgian Agency for Innovation and Technology
HR	Human Resources

ICOs	Initial Coin Offerings
ICT	Information and Communication Technology
IFC	International Finance Corporation
ILO	International Labour Organization
INFE	(OECD) International Network on Financial Education
IoT	Internet of Things
LATAM	Latin America
NBG	National Bank of Georgia
NFTs	Non-Fungible Tokens
NGO	Non-Governmental Organization
OCEEA	Office of the Co-ordinator of OSCE Economic and Environmental Activities
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the High Commissioner for Human Rights
OSCE	Organization for Security and Co-operation in Europe
SMEs	Small and Medium-sized Enterprises
SSE	(UN) Sustainable Stock Exchanges
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
USAID	United States Agency for International Development
USDC	USD Coin
VA	Virtual Assets
VASPs	Virtual Asset Service Providers
VET	Vocational Education and Training
WEF	World Economic Forum
WEPs	(UN) Women's Empowerment Principles
Wtech	(Türkiye's) Women in Technology Association

Introduction

Web 3.0 Evolution: Promises of Decentralization and Disruption

The landscape of the internet has undergone many steps of transformational evolution since its inception. From the static web pages of Web 1.0 to the dynamic, interactive platforms of Web 2.0, each phase has reshaped how we connect, share information, get education, and conduct business online. Now we stand at the precipice of another paradigm shift – the dawn of the Web 3.0 era. Web 3.0, often referred to as the decentralized web, marks a fundamental departure from its predecessors by introducing principles of decentralization, blockchain technology, and user empowerment. The future of the internet is envisioned as a more open, secure, and user-centric space, where individuals have greater control over their digital identity, data, and interactions.

In an era marked by unprecedented technological advancements and the rapid digitalization of economies worldwide, blockchain technology and the virtual assets sector have emerged as transformative forces shaping the future of finance and commerce. Decentralized finance, an emerging system enabling asset transfers without banks or intermediaries, spanning cryptocurrencies and diverse

blockchain applications boldly promises a myriad of advantages for Web 3.0 participants. These encompass financial autonomy, heightened security, enhanced privacy, and the potential for wealth accumulation. In contemporary settings, not only has the virtual assets sector emerged, but also begun to extend an inclusive hand by dismantling traditional financial barriers and empowering marginalized groups.

The innovative technology of blockchain made its debut in 2008 through a groundbreaking white paper authored by the enigmatic figure known as Satoshi Nakamoto. This pivotal moment marked the inception of a transformative force that continues to reshape industries and redefine the possibilities of decentralized systems.¹

Cryptocurrencies, blockchain technology, and non-fungible tokens are just a few examples of innovations that have captured the imagination of individuals and investors alike. However, as these innovations become more prominent, it has become increasingly evident that they are not immune to the pervasive issue of gender inequality, an issue that persists across a wide range of industries.

The importance of fostering inclusivity and diversity for long-term sustainability and innovation within blockchain technology and the virtual assets sector is indisputable. The advancement of gender equality is not only a matter of social justice, but also an economic imperative in the drive towards financial inclusion, financial literacy, and financial independence for women. While the technology and finance sectors have long grappled with gender disparities, the unique characteristics of blockchain and virtual assets present their own set of complexities. The gender gap in blockchain literacy and in the virtual assets sector is a multifaceted challenge that warrants close examination.

A key focus is the extent of the gender gap within the new technology realm and its implications. This report will provide a comprehensive analysis of the factors contributing to this divide and propose actionable strategies to bridge it. The analysis will highlight the challenges and opportunities faced by women, such as the gender disparities in Web 3.0 education, understanding and skills, including ownership and utilization of cryptocurrencies.

¹ Nakamoto, S. (2008) A peer-to-peer electronic cash system, Bitcoin. Available at: <https://bitcoin.org/en/bitcoin-paper> (Accessed: 20 Dec. 2023).

Cryptocurrency: The 2024 Global Adoption Index

The 2024 Global Cryptocurrency Adoption Index by Chainalysis,² a blockchain analytics tool provider, highlights a significant surge worldwide in grassroots-level adoption of cryptocurrencies (increased usage of cryptocurrencies by everyday individuals and small-scale users, rather than large institutions or investors), with the Central & Southern Asia and Oceania (CSAO) region leading the charge. Grassroots-level adoption refers to the everyday use of cryptocurrencies by individuals and small businesses, rather than large-scale institutional investment or trading activity. Countries such as India, Indonesia, the Philippines, and Vietnam dominate the top rankings, reflecting high engagement with both centralized exchanges and decentralized finance (DeFi) services.

The Global Crypto Adoption Index is based on a comprehensive methodology encompassing on-chain data, transaction volumes, and purchasing power parity. It underscores the growing influence of cryptocurrency in emerging markets. Each of the 151 countries included in the Index is evaluated based on four sub-indexes reflecting different types of cryptocurrency activity. Rankings are weighted by factors such as population size and purchasing power, then combined using a geometric mean. The final scores are normalized on a scale from 0 to 1, with scores closer to 1 indicating higher levels of adoption (see Table 1 below).

The 2024 report notes an increase in crypto activity across all income brackets globally, although low- and middle-income countries remain

pivotal in driving adoption, especially through retail-sized transactions and stablecoin usage for real-world needs (see Table 2 below).

Key methodological updates in 2024 include refined tracking of DeFi transactions and the removal of peer-to-peer exchange data due to declining relevance. Notably, institutional activity surged following the U.S. launch of a Bitcoin ETF, while DeFi growth accelerated in Sub-Saharan Africa, Latin America, and Eastern Europe, contributing to altcoin expansion (see Table 3 below).

These findings provide an essential context for understanding gender disparities in crypto adoption, especially in regions experiencing rapid but uneven digital financial integration.

Table 1



² <https://www.chainalysis.com/blog/2024-global-crypto-adoption-index/>

Table 2

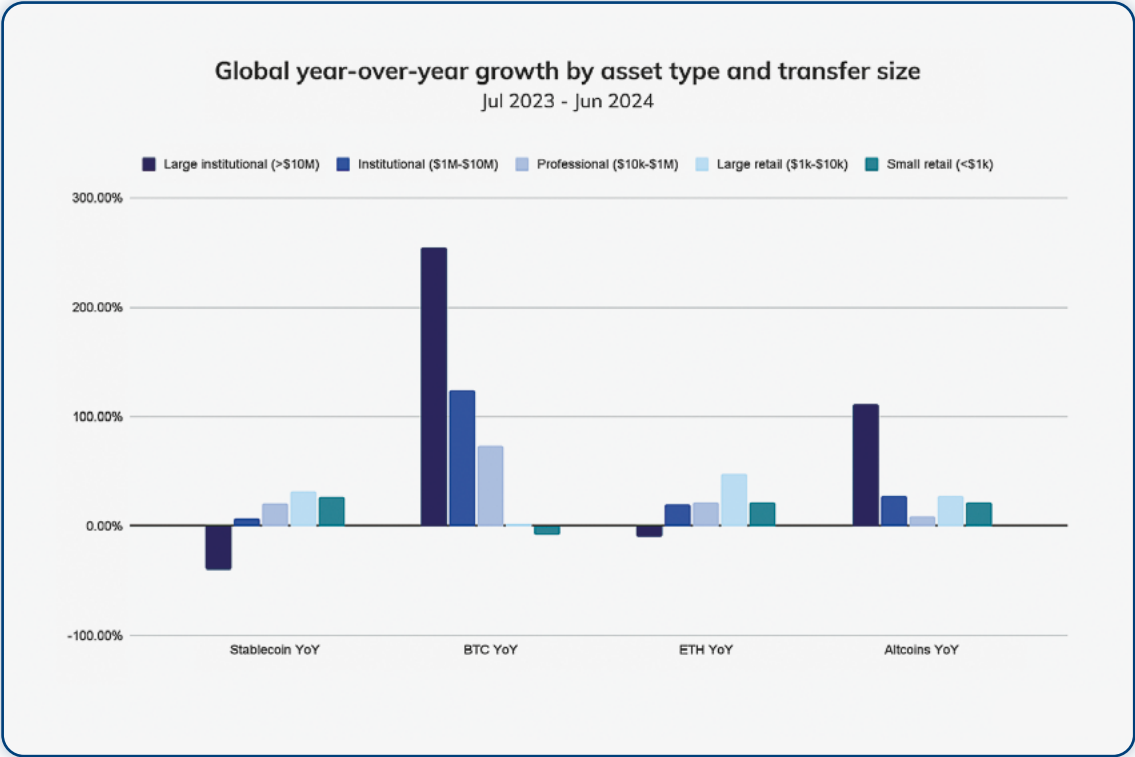
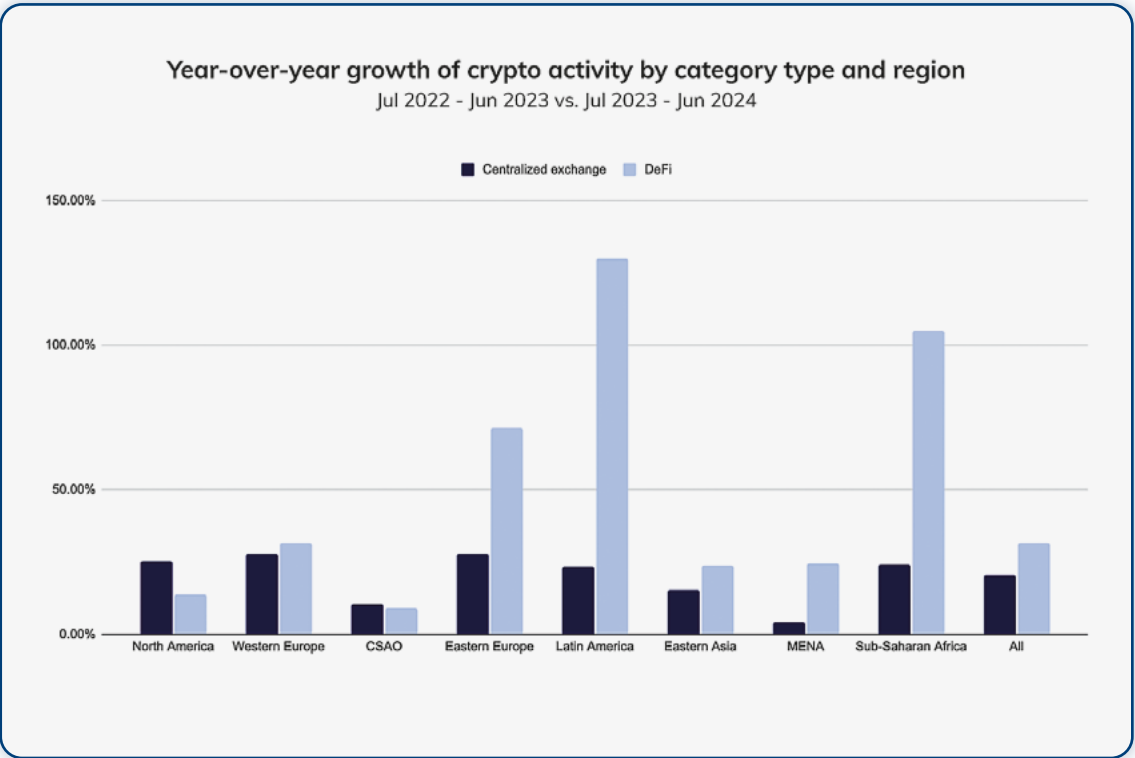


Table 3



The 2024 Global Crypto Adoption Index highlights Central & Southern Asia and Oceania (CSAO) as the leading region, with seven of

the top twenty countries ranked globally (see Table 4 below). The region's dominance is driven by strong engagement in local crypto

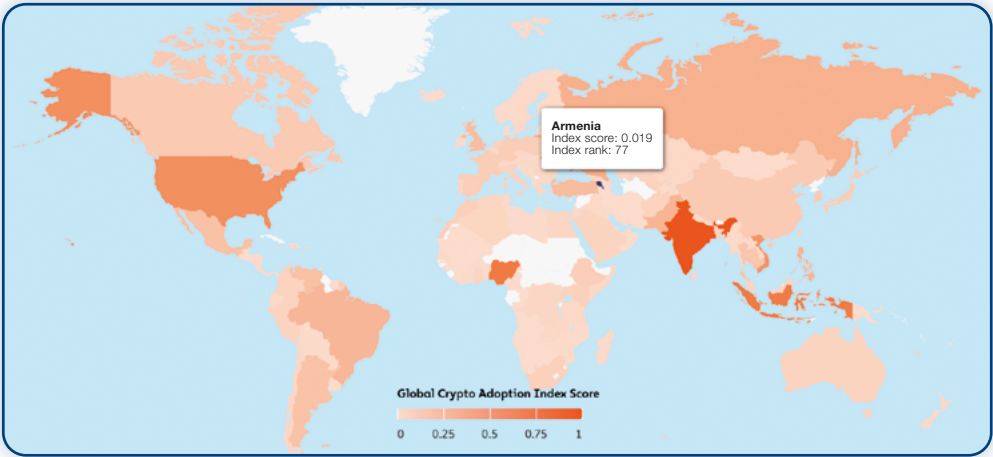
exchanges, widespread use of merchant services, and significant activity on DeFi platforms.

Table 4

Country	Region	Overall index ranking	Centralized service value received ranking	Retail centralized service value received ranking	DeFi value received ranking	Retail DeFi value received ranking
India	CSAO	1	1	1	3	2
Nigeria	Sub-Saharan Africa	2	5	2	2	3
Indonesia	CSAO	3	6	6	1	1
United States	North America	4	2	12	4	4
Vietnam	CSAO	5	3	3	6	5
Ukraine	Eastern Europe	6	7	5	5	6
Russia	Eastern Europe	7	11	7	7	7
Philippines	CSAO	8	9	8	14	9
Pakistan	CSAO	9	4	4	18	13
Brazil	LATAM	10	8	10	10	14
Türkiye	Middle East & North Africa	11	14	11	15	11
United Kingdom	Central, Northern & Western Europe	12	12	21	9	8
Venezuela	LATAM	13	17	16	11	12
Mexico	LATAM	14	18	17	13	10
Argentina	LATAM	15	13	13	17	20
Thailand	CSAO	16	16	15	19	16
Cambodia	CSAO	17	10	9	35	23
Canada	North America	18	22	26	16	15
South Korea	Eastern Asia	19	15	14	33	33
China	Eastern Asia	20	20	18	24	22

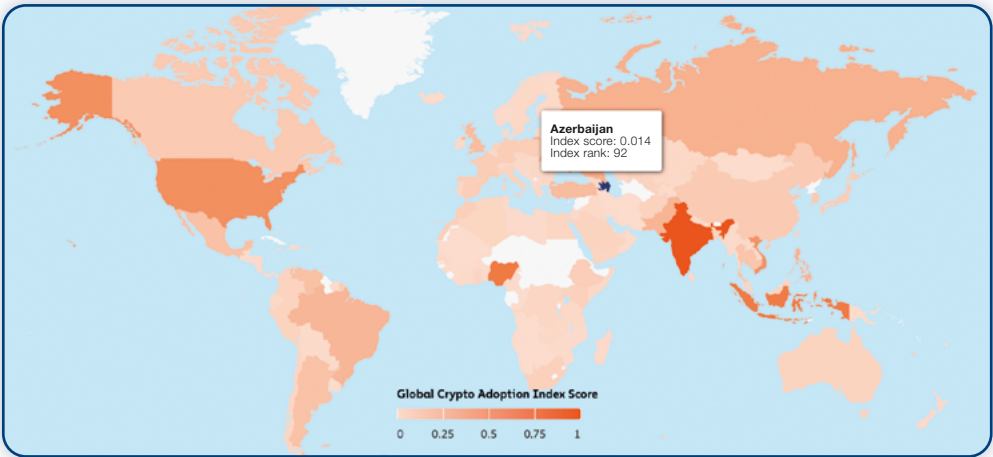
ARMENIA

Table 5



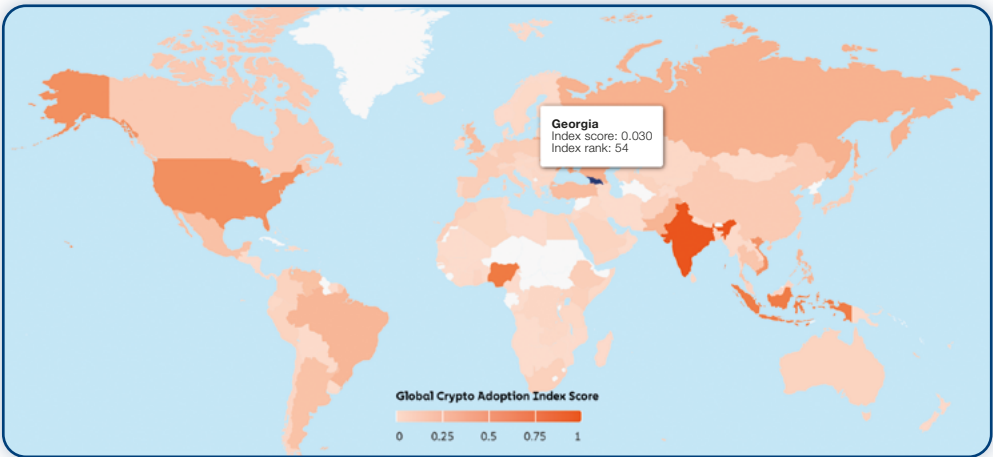
AZERBAIJAN

Table 6



GEORGIA

Table 7



MOLDOVA

Table 8

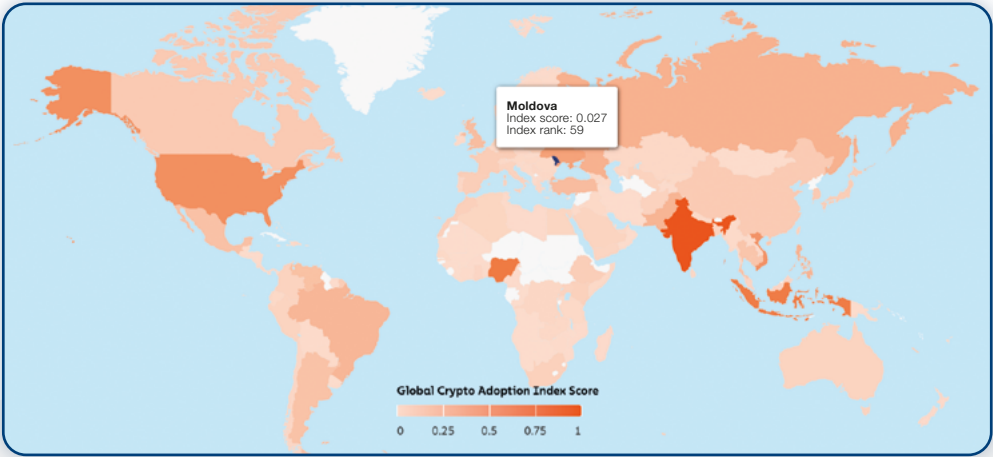


Table 9

A selection of ten cryptocurrencies with the largest market caps as of 29 April 2025. See also the link below.

Name	Symbol	Market Cap (29.04.2025) ³	Comparable to the Gross Domestic Product of the following country ⁴
BITCOIN	BTC	\$1.7 TRILLION	SPAIN
ETHEREUM	ETH	\$226.1 BILLION	PORTUGAL
TETHER USDT	USDT	\$144.0 BILLION	SLOVAKIA
XRP (RIPPLE COIN)	XRP	\$124.8 BILLION	BELARUS
BNB (BINANCE COIN)	BNB	\$87.5 BILLION	LUXEMBOURG
SOLANA	SOL	\$65.4 BILLION	SLOVENIA
USD COIN	USDC	\$60.1 BILLION	LATVIA
DOGECOIN	DOGE	\$25.5 BILLION	MALTA
CARDANO	ADA	\$23.8 BILLION	ICELAND
TRON	TRX	\$22.4 BILLION	BOSNIA AND HERZEGOVINA

Name	Symbol	Market Cap	Comparable to the Gross Domestic Product of the following country ⁵
BITCOIN	BTC	\$855,462,215,270	
ETHEREUM	ETH	\$276,947,812,737	
TETHER USDT	USDT	\$91,099,750,603	
BNB	BNB	\$40,623,437,721	
SOLANA	SOL	\$39,954,805,081	
XRP	XRP	\$33,484,853,712	
USD COIN	USDC	\$24,776,712,774	
CARDANO	ADA	\$21,733,091,363	
AVALANCHE	AVAX	\$16,165,283,288	
DOGECOIN	DOGE	\$13,251,749,221	
POLKADOT	DOT	\$10,167,695,767	

³ Top 10 Cryptocurrencies Of April 29th, 2025 (2025) Forbes. Available at: 10 Best Cryptocurrencies of May 2025 – Forbes Advisor (Accessed: 7 May 2025)

⁴ Based on the World Bank Data, GDP (current US\$), https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=false (Accessed: 7 May 2025)

⁵ Based on the World Bank Data, GDP (current USD), https://data.worldbank.org/indicator/NY.GDP.MKTP.CD?most_recent_value_desc=false (Accessed: 22 Dec. 2023).

Enhancing Financial Inclusion through Cryptocurrency and DeFi Adoption

The adoption of cryptocurrency and decentralized finance (DeFi) is increasingly seen as a key driver for improving financial inclusion, particularly for underserved populations. Financial inclusion is defined as the ability of individuals to access safe, fair, and affordable financial services. According to the World Bank's 2017 Global Index Database 1.7 billion adults worldwide remain unbanked⁶ and the International Finance Corporation (IFC) indicates that approximately 200 million small and medium-sized enterprises (SMEs) face challenges in accessing traditional banking.⁷ This exclusion is exacerbated by geographic limitations, high fees, and a lack of financial products that meet diverse needs, particularly in developing countries.

Cryptocurrency and DeFi offer promising solutions to these challenges by reducing transaction costs through decentralized consensus mechanisms such as proof-of-work and proof-of-stake, which eliminate the need for third-party intermediaries. Since a significant portion of unbanked populations own mobile phones, blockchain-based financial services can be delivered via mobile applications, thus overcoming geographical barriers and providing greater accessibility to financial services.

Furthermore, blockchain technology enhances transparency and trust in financial systems, enabling new financial products such as peer-to-peer and informal transactions that better address the needs of financially excluded individuals. These solutions can be particularly impactful for people in regions with limited access to traditional banking.

Scholars have emphasized that these technologies offer substantial potential in addressing the global challenge of financial exclusion, particularly in underserved regions. Chen and Bellavitis (2020) argue that "cryptocurrency and DeFi have the ability to democratize access to financial services by removing traditional banking intermediaries, which are often the barriers to financial inclusion." Their work underscores the importance of these technologies in creating financial systems that are more accessible, transparent, and equitable. Similarly, Lichtfous et al. (2018) highlight that "cryptocurrency, with its decentralized nature, reduces transaction costs and expands access to financial services for unbanked populations." The authors suggest that blockchain technology, the backbone of both cryptocurrency and DeFi, provides a solution to the high fees and

geographical limitations that prevent many individuals from accessing traditional banking services. Schuetz and Venkatesh (2020) further note that "blockchain's inherent capabilities of decentralization and transparency make it an attractive option for financial inclusion." By utilizing consensus mechanisms such as proof-of-work and proof-of-stake, DeFi platforms can offer low-cost financial services, allowing individuals to bypass traditional banking systems, which are often inaccessible or too costly for many, especially in developing countries.

The adoption of cryptocurrency and DeFi, however, is influenced by a variety of factors, including social, economic, technological, political, regulatory, and cultural elements. It is necessary to explore these multifaceted drivers through a configurational analysis, which can offer insights into how the interaction of these factors contributes to the adoption of cryptocurrency and DeFi in various countries. By examining the interdependencies among these variables, it is possible to draw the complex landscape of adoption and its potential to bridge the gender gap in the ownership and use of cryptocurrencies.

⁶ <https://www.worldbank.org/en/news/press-release/2018/04/19/financial-inclusion-on-the-rise-but-gaps-remain-global-index-database-shows>

⁷ <https://www.ifc.org/content/dam/ifc/doc/mgrt/em-compass-note-109-jan-2022.pdf>

Background

In the dynamic landscape of the digital age, ensuring inclusion and autonomy for women is more critical than ever, especially within the realm of virtual assets. The virtual assets sector, encompassing cryptocurrencies, blockchain technology, and non-fungible tokens (NFTs), has rapidly gained prominence, but remains marked by a glaring gender gap.

There is a significant potential to increase the financial inclusion of women by using digital finance tools, especially women who are excluded from traditional financial systems. According to a report by the World Bank (statistics supported by the World Bank's Global Findex Database 2021), women are nearly 10% less likely than men to have a bank account, and the gender gap is even wider in some regions. According to the report, in developing economies, the gender gap in account ownership has decreased to six percentage points from nine percentage points, where it had remained for many years. This data underscores the persistent disparities in financial inclusion between men and women, highlighting the need for targeted efforts to bridge this gap. Lack of financial access has significant consequences: it limits the ability of women to invest, save, and participate in the economy.

Cryptocurrency and digital financial tools have the compelling potential advantage to grant women enhanced financial autonomy. Conventional financial systems often uphold patriarchal structures, leaving women subject to the financial constraints imposed by husbands or other male relatives. The adoption of digital finance tools empowers women to seize

control of their own financial destinies, enabling them to invest in assets and engage in economic activities on their own terms. In this context, Central Bank Digital Currencies (CBDCs), digital incarnations of traditional fiat currencies endorsed by central banks, have emerged as a pivotal instrument in advancing the financial inclusion of women.

These innovative currencies can be securely stored and conveniently transacted through digital wallets, potentially serving as a key vehicle for providing financial access to marginalized and underserved communities. While most CBDCs are currently in an experimental phase, they hold the promise of revolutionizing financial services, making them more accessible, cost-effective, and secure for women in developing countries. It is precisely in these regions, as emphasized by Kristalina Georgieva, Managing Director of the International Monetary Fund, where the most significant barriers to financial inclusion persist, thus highlighting the transformative potential of CBDCs in advancing gender equity and financial empowerment.⁹

The landscape has undergone a rapid transformation for some women, especially those who have had to look for solutions and make changes. Ukrainian women who have been forced to make changes have increasingly turned to cryptocurrency as a solution to circumvent the significant challenges associated with carrying substantial sums of cash, or attempting to access their bank accounts in difficult circumstances, both domestically and internationally. Recent reports have highlighted that

Ukrainian refugees, particularly women, have embraced cryptocurrency as a means to convert their digital assets into fiat currency upon reaching a new country. For instance, the United Nations High Commissioner for Refugees (UNHCR), in partnership with the Stellar Development Foundation, launched a pilot programme delivering humanitarian aid in the form of USD Coin (USDC) directly to digital wallets of refugees. Recipients are then able to exchange these funds for local currency at MoneyGram locations, providing a secure and efficient means of accessing financial resources without relying on traditional banking systems.¹⁰ This burgeoning trend underscores the pervasive demand for a borderless digital currency, currency that can seamlessly transcend geographical boundaries. Notably, in a significant development, the United Nations took a groundbreaking step by instituting an aid initiative tailored for the benefit of those affected by the conflict in Ukraine, which includes substantial numbers of women. This initiative has marked a pivotal moment in the adoption of digital currencies for humanitarian purposes, employing stable coins to extend much-needed assistance to millions of women and other war-affected individuals in the region.

"A lack of female representation in crypto is a problem because in order to have a financial revolution you need diverse perspectives and participation. With half of the world's population being women, participation among women needs to be higher for there to be mass adoption." – Hailey Lennon, a corporate attorney at Anderson Kill.

8 <https://www.worldbank.org/en/publication/globalfindex>

9 <https://www.imf.org/en/News/Articles/2023/11/15/sp-111423-the-digital-finance-voyage-a-case-for-public-sector-involvement>

10 <https://www.unhcr.org/ua/en/news/unhcr-launches-pilot-cash-based-intervention-using-blockchain-technology-humanitarian-payments>

About the OSCE

The Organization for Security and Co-operation in Europe (OSCE) is the world's largest regional security organization, with 57 participating States covering North America, Europe, South Caucasus, Central Asia, and Mongolia. It was established in 1975 during the Cold War as a platform for promoting dialogue and co-operation, and takes a comprehensive view of "security," encompassing not only the military and political dimensions, but also the economic, environmental, and human dimensions. Its primary aim is to prevent conflicts and promote regional co-operation through mechanisms such as diplomatic negotiations, conflict resolution initiatives, confidence-building measures, and arms control agreements. In addition, the OSCE does work to support democratic and human rights, such as by monitoring elections.

The OSCE participating States have adopted a large body of commitments in the realms of anti-corruption and anti-money laundering, recognizing these issues as critical to regional stability, security, and economic development. In response to the rapid technological development of digital finance and the growing risks of

money laundering using virtual assets and cryptocurrencies, the Office of the Co-ordinator of OSCE Economic and Environmental Activities (OCEEA) launched the project "Innovative policy solutions to mitigate money laundering risks of virtual assets,"¹¹ which aims to strengthen regulatory frameworks and build capacity of regulatory bodies and law enforcement to recognize and address risks associated with virtual assets.

When it comes to the topic of the gender gap within the virtual asset ecosystem, the OCEEA is helping to highlight, understand, and propose solutions to bridge gaps by facilitating knowledge exchange and competence-building among participating States, with the aim to improve the level of financial literacy and independence in the Web 3.0 era, accompanied by cryptocurrency usage among women. This is significantly needed work, since Web 3.0 education and skills are crucial and by nature, not limited to a specific region. Thus public and private sector co-operation is vital in the process of sustainable economic prosperity and growth.

By examining the challenges and opportunities faced by women in

digital finance, the OCEEA aims to highlight the importance of fostering inclusivity and diversity for long-term sustainability and innovation within the blockchain technology and virtual assets sector. The advancement of gender equality is not only a matter of social justice, but also an economic imperative in the drive towards financial inclusion, financial literacy, and financial independence for women.

This study was commissioned as a part of the OCEEA project "Innovative policy solutions to mitigate money laundering risks of virtual assets," in order to comprehensively understand how to address the gender gap in the virtual asset ecosystem in the South Caucasus (Armenia, Azerbaijan, Georgia) and in Moldova. The focus of the research has been on the use and ownership of virtual assets and cryptocurrencies by women, with the aim of inclusivity, economic parity, and digital literacy.

This study was made possible with the support of the Governments of Germany, Italy, Poland, Romania, the United Kingdom, and the United States.



¹¹ See: <https://www.osce.org/VIRTUALASSETS> (Accessed 25 April 2025).

Understanding the Global Gender Gap

Understanding the Global Gender Gap

Hyland et al. (2020) used the World Bank's Women, Business and the Law (WBL) database to study legal gender discrimination and its impact on women's economic opportunities across 190 economies over 50 years. Legal gender discrimination encompasses laws, policies, or regulations that treat individuals differently based on gender, affecting areas such as employment, pay, marriage, and parenthood. The study revealed that legal gender discrimination persists globally, particularly in highly populated countries. The WBL report also

revealed that out of 187 countries, only 6 European countries (Belgium, Denmark, France, Latvia, Luxembourg, and Sweden) provide women with equal legal work rights as men (Tovmasyan & Minasyan, 2019). These nations achieved a perfect score of 100 in the report's index, indicating that their laws granted equal legal rights to women and men across various areas affecting the work lives of women, including mobility, workplace protections, pay, marriage, parenthood, entrepreneurship, asset ownership, and pensions. This marked a significant improvement from a decade earlier,

when none of these countries had achieved full legal equality in the measured areas.

The International Labor Organization's analysis of data from 75 countries reveals the gender pay gap in the technology sector to be 21%, whereas it is 16% for the economy overall. In the 36 OECD countries, the average gender pay gap is 13.6% (Cadena, 2020). This disparity in earnings between men and women over their lifetimes results in a global wealth loss of USD 160 billion (Cadena, 2020).

Gender Disparities in Global Tech Education

Literature suggests that gender disparities in STEM education exist globally (Kuschel et al., 2020; Lee et al., 2021). According to the World Bank's findings, women's participation in university studies in STEM disciplines is still a minority, although the situation is better at the doctoral level (Cadena, 2020). Within STEM disciplines, women are under-represented in engineering and computer science (Cadena, 2020). National and institutional systems and structures tend to reinforce the participation of men in STEM higher education. The issue is complex and multifaceted, with women's under-representation in STEM fields attributed to factors such as limited access to STEM education, stereotypes and bias, and a lack of mentorship opportunities (Lee et al., 2021). Social influence, particularly from same-sex peers, significantly impacts preferences for STEM subjects, with female students more likely to continue their STEM education when other girls in their classroom also express an interest in STEM (Raabe et al., 2019).

STEM preferences develop during adolescence and early adulthood and can lead to occupational gender segregation in adult life (Raabe et al., 2019). Girls lose interest in STEM during middle school and their confidence in their math abilities compared to boys decreases significantly (Kuschel et al., 2020). It is widely established in the relevant literature that women are less likely to pursue advanced technical education after secondary levels because of these challenges (Lee et al., 2021). Furthermore, research indicates that 82% of women who initially aspired to pursue male-dominated careers during their senior year of high school opt to alter their career aspirations by the age of 25, transitioning towards a gender-neutral or female-dominated career path (Kuschel et al., 2020, p. 6). To address the gender disparity in STEM education and encourage more women to pursue these fields, early policy interventions, mentorship programmes, career counseling, real-life application of knowledge, and female role models in academia and industry are needed (Kuschel et al., 2020; Lee et al., 2021, p.23).

Research shows that the gender inequality in education decreases through the use of labour-saving home appliances, which reduce the time required for household chores and allow women to increase their labour market participation (Dao et al., 2021). Such technological progress also results in parents investing relatively more in their daughters' education (Dao et al., 2021). Studies have shown that putting an average daughter through tertiary education is more effective than doing so for an average son (Dao et al., 2021). Higher education, particularly in STEM fields, can lead to greater job opportunities and higher earnings. Therefore low female enrolment in STEM education programmes leads to gender pay gaps, since women are then unable to join the tech industry in leadership roles (Lee et al., 2021, p.38).

Lee et al., (2021) studied gender disparities in STEM education in various countries, including Kazakhstan, Taiwan, and South Africa. Research indicates that while there

were significant gender gaps in higher education, gender segregation is now in decline and opportunities in technical disciplines have increased for women in China (Lee et al., 2021). China's initiatives to minimize the

gender gap in education are also helping women in rural areas who earlier faced location and economic disadvantages (Lee et al., 2021, p.34). Sweden, a relatively gender-equal European country, still has substantial

gender disparity in the proportion of women scientists and engineers as compared to other European countries, thus showing the divide in educational and occupational choices (Raabe et al., 2019).

Studies on Women's Financial Education and its Impact on Global Economies

Financial education plays a crucial role in empowering individuals, especially women, by providing the tools necessary to make informed financial decisions. With the increasing importance of digital finance, including cryptocurrencies, financial literacy becomes an essential skill in reducing gender disparities. Studies demonstrate that financial education, particularly in emerging technologies like cryptocurrencies, plays a vital role in empowering women and promoting gender equality in financial systems. The gender gap in financial literacy remains a significant barrier, but targeted education programmes have shown promising results in reducing this gap. As women gain financial literacy, they are better equipped to participate in both traditional and digital economies, thus contributing to economic growth and global development. The ongoing efforts to increase women's financial education, particularly in the realm of digital finance, are crucial for promoting gender equality and harnessing the full potential of women in the global economy.

Financial education and empowerment

Research highlights that financial education for women is not only about improving financial decision-making, but also about empowering women to achieve economic independence and security. A study by Lusardi et al. (2010) emphasizes that financial literacy is closely linked to wealth accumulation and economic well-being. Women, in

particular, benefit from financial literacy programmes that increase their ability to manage personal finances, invest, and understand financial markets. As women become more financially educated, their economic participation increases, leading to greater economic autonomy and reducing poverty rates among women (Sherraden, 2014).

Gender disparities in financial education

While financial literacy is essential for economic empowerment, numerous studies show that women globally face significant barriers to accessing financial education. According to the World Bank (2014), women are less likely to participate in formal financial education programmes than men, and they often have lower levels of financial literacy. This gap in financial knowledge and confidence limits women's ability to make informed decisions about savings, investments, and credit usage. Moreover, gender stereotypes and cultural norms often discourage women from engaging in financial markets, including the growing field of cryptocurrencies (Global Financial Literacy Excellence Center, 2017).

Impact on cryptocurrency ownership and use

The advent of cryptocurrencies has introduced new financial opportunities, but it has also revealed the gender gap in financial knowledge. Studies on cryptocurrency ownership show that

women are underrepresented in the market. According to a 2021 report by Statista, women account for only 15% to 20% of global cryptocurrency owners.¹² This gap is attributed in part to lower financial literacy levels among women, particularly in emerging technologies like blockchain and cryptocurrencies. Women's lack of access to specialized education on digital assets and the technical complexities of cryptocurrency trading limits their participation in the space (Chakraborty & Naik, 2021). However, evidence also suggests that targeted financial education programmes focused on cryptocurrencies and blockchain technology can and already have increased female participation in the digital economy. For instance, initiatives like Binance's Women in Technology Academy and Women's World Banking have been shown to increase women's interest and engagement in digital finance by providing education on topics like blockchain, digital wallets, and cryptocurrency investments. By improving financial literacy in these areas, these programmes aim to empower women to take advantage of emerging financial technologies and reduce the gender gap in cryptocurrency ownership.

Economic impact of financial education for women

The broader economic impact of financial education for women is

¹² <https://www.statista.com/statistics/1202468/global-cryptocurrency-ownership/>

significant. By improving women's access to financial education and services, economies can tap into a previously underutilized workforce, boosting economic growth and

reducing income inequality. Moreover, as women become more financially literate, they are also more likely to invest in their own businesses, contribute to the entrepreneurial

ecosystem, and promote sustainable economic development (Global Partnership for Financial Inclusion, 2020).

Global Landscape of Gender in Tech Workplaces

Research shows that women tend to leave STEM education and jobs at a higher rate than men (Kuschel et al., 2020; Raabe et al., 2019). Women are either opting out or pushed out at various stages of their career, as illustrated by the metaphor of the “leaky pipeline,” referring to the fact that the number of women decreases as career levels increase (Kuschel et al., 2020; Raabe et al., 2019). Of women in STEM, 52% quit their jobs in their mid- or late thirties due to dissatisfaction with the workplace climate, a need to spend more time with their family, or the desire for more job flexibility in order to raise a family (Kuschel et al., 2020). Women may face barriers such as a lack of support, access to mentors, or opportunities for training and development (Kuschel et al., 2020). Additionally, there are gendered social structures, gendered division of labor and workplace interactions, and norms for behaviours and interactions (Kuschel et al., 2020). This contributes to the widening of the gender gap in STEM (Raabe et al., 2019).

Gender disparities in professional settings, particularly in STEM entrepreneurship, are well-documented in the relevant literature. Studies have pointed to gender inequalities at all levels, from the micro-level (lifestyle choices and career progression), to the meso-level

(academic career development and mentorship), and the macro-level (gendered language and attitudes towards financial transactions and commercial environments) (Kuschel et al., 2020). Women in the technology sector are concentrated in lower-pay occupations, such as project management, rather than higher-pay software development jobs (Cadena, 2020). Only 22% of artificial intelligence professionals are women (Tovmasyan & Minasyan, 2019). Female researchers tend to be concentrated in universities, government, and non-profit organizations. Their presence in the business world needs to expand. Throughout their careers, women are often unable to attain senior positions, a factor that is true for academia, companies, and public science areas and technology systems (Cadena, 2020). Written policies promoting gender equality should be developed at both the organizational and State levels to promote gender equality, including means for reporting gender discrimination in tech workplaces (Tovmasyan & Minasyan, 2019).

Cadena (2020) conducted research on the gender gap in technology and the potential impact of technological advancements on women in the workforce. The study revealed that women are underrepresented in science and technology fields, a situation that will put them at

a disadvantage as the workplace undergoes significant transformations due to robotics, automation, artificial intelligence, and other emerging technologies. An analysis undertaken by the International Monetary Fund¹³ suggests that women may encounter challenges associated with job loss and automation in particular sectors because of their higher representation in roles involving routine tasks, which also contributes to gender inequality in pay for work. Specifically, the report estimates that 11% of the female workforce is at high risk of being automated, compared to 9% of the male workforce. Factors such as lower educational attainment, older age, and employment in low-skill clerical, service, and sales positions contribute to this increased vulnerability among women.

UNESCO has prioritized the promotion of STEM fields for women and has taken action to recognize and stimulate female researchers' merits in a number of countries. Additionally, UNESCO created the Broadband Commission to ensure that the gender gap in broadband access and use is closed, thus recognizing the impact broadband access has on women's ability to connect to the world and access education and new forms of social and business participation (Cadena, 2020).

13 <https://www.imf.org/en/Publications/Staff-Discussion-Notes/Issues/2018/10/09/Gender-Technology-and-the-Future-of-Work-46236>

Gender Representation in Global Blockchain, Crypto Companies, and Financial Institutions

The gender representation within global blockchain, cryptocurrency companies, and financial institutions remains a significant concern in the context of the ongoing gender gap in the ownership and use of cryptocurrencies. Despite the increasing integration of blockchain and digital finance into the global economy, women continue to be underrepresented in leadership positions and as active participants in the industry.

Studies and reports highlight the disproportionately low number of women in key roles within the sector, such as executive leadership, technical positions, and investment decision-making. While some blockchain and crypto companies have made strides in promoting diversity, the overall trend shows that women remain a minority in terms of both employment and active engagement with digital assets. Research also points to a stark lack of women in blockchain and crypto-related educational pathways and programmes, further contributing to the gender imbalance in the industry.

Financial institutions and traditional banking systems, despite efforts toward gender equality, also exhibit gender disparity, especially in their digital and cryptocurrency-related services. Female users of cryptocurrencies and blockchain platforms represent a small portion of the customer base, which is partially driven by a lack of targeted marketing, limited educational resources, and unaddressed security concerns. Nevertheless, increasing awareness and initiatives aimed at improving gender equality are being introduced. Some blockchain and

crypto companies have implemented diversity programmes and inclusive recruitment strategies that aim to create more opportunities for women. Furthermore, financial institutions are beginning to recognize the importance of addressing the gender gap and are thus taking steps to foster greater inclusion of women in both their workforce and their customer base.

On 24 January 2025, at the conference Corporate Governance, Sustainability & Diversity, Petra Hielkema, the Chairperson of ELOPA (European Insurance and Occupational Pensions Authority), discussed the critical importance of gender diversity in financial services. Hielkema emphasized the compelling business case for gender equality, noting that organizations with higher gender diversity tend to outperform their peers financially. Despite these benefits, women remain significantly underrepresented in leadership positions globally, particularly in the financial sector. The address also highlighted persistent structural barriers that prevent women from advancing to top roles, despite educational achievements and rising participation in the workforce. Hielkema referenced the work of Nobel laureate Claudia Goldin, which identifies family caregiving responsibilities and rigid workplace structures as key factors hindering women's progress in leadership. Moreover, Hielkema underscored the real-world consequences of gender bias in financial services, drawing attention to the concept of "invisible women" as described in the book by Caroline Criado Perez.¹⁴ She outlined how biases – such as flawed automotive

safety tests or gender-insensitive credit scoring models – are perpetuated by insufficient female representation in decision-making roles. These biases not only harm women, but also lead to mispriced risks and missed opportunities in financial services. The keynote also addressed the growing risk of gender disparities in the face of technological advancements, particularly the rise of AI and automation. Women are overrepresented in roles that are most susceptible to automation. Without proactive efforts to reskill and support inclusive career paths, women may be disproportionately affected by technological changes in the financial sector. In terms of policy, the EU has begun to take meaningful steps to promote gender equality, with regulations like the Women on Boards Directive and the introduction of diversity policies in financial sectors. Hielkema also stressed the importance of financial institutions incorporating diversity as a core governance issue, alongside reskilling efforts and inclusive product design to better serve diverse populations.

Natassja Aleksy, a product developer at Diversity in Blockchain, emphasizes the importance of building a Web 3.0 ecosystem that is inclusive, learning from the mistakes of Web 2.0. The podcast episode "Diversity in Blockchain – Building a Web3 that includes everyone"¹⁵ highlights critical discussions on the need for inclusivity and diversity within the blockchain and cryptocurrency sectors. The conversation focuses on ensuring equal participation and representation across all demographics, particularly underserved communities, by

¹⁴ https://www.eiopa.europa.eu/financial-services-gender-inclusion-2025-01-24_en

¹⁵ Criado Perez, Caroline. (2019). *Invisible Women: Data Bias in a World Designed for Men*. London: Chatto & Windus.

¹⁶ <https://www.cryptotrueism.org/blog/crypto-altruism-podcast-episode87-diversity-in-blockchain-building-a-web3-that-includes-everyone>

integrating education and equitable opportunities in the development of blockchain technologies. A central theme discussed in the podcast is the significant role of education and representation in creating a more inclusive Web 3.0. Leaders and organizations in the blockchain and

crypto industries are urged to prioritize these elements when developing teams and expanding movements. This focus on inclusivity can help avoid repeating the exclusivity and inequality seen in Web 2.0. While acknowledging the long journey ahead to achieve full inclusivity, the podcast highlights

several groups actively working towards diversity and representation in Web 3.0. These organizations are critical resources for newcomers, especially women, seeking to enter the blockchain and cryptocurrency industries, where their representation has traditionally been low.

Global Trends in Gendered Investments and Financial Literacy

There is a gap in financial literacy between men and women when it comes to knowledge of financial systems, digital currencies including cryptocurrencies, decentralized finance (DeFi) and fintech services and products (Akadur & Senkardes, 2021; Alonso et al., 2023; Chen et al., 2023; Steinmetz et al., 2021). Akadur and Senkardes (2021) presents factors influencing women's cryptocurrency investment decisions. The findings of the paper indicate that only 32.6% of the women respondents in the study had invested in cryptocurrencies. This low percentage can be attributed to factors such as income, levels of knowledge about cryptocurrency investments, and labour force participation rates. Of the women respondents, 56% had never heard of cryptocurrencies or had very limited knowledge about them (Akadur & Senkardes, 2021, p.186).¹⁷ This compliments other studies that show women's financial knowledge level to be generally lower than that of men (Akadur & Senkardes, 2021, p.183).

Alonso et al., (2023) studied the adoption and ownership of cryptocurrencies in Spain. The study notes that the variables that drive the adoption and ownership of

cryptocurrencies in women have not been extensively studied, despite numerous studies focusing on analyzing the variables that determine the use of cryptocurrencies, such as income, age, confidence, and level of education. It is, however, established in the relevant literature that gender significantly influences the decision to purchase, invest and own cryptocurrencies, with men being more likely than women to make this decision. It is also established that women are more risk-averse, a factor that could also be contributing to the gender gap in cryptocurrency adoption and ownership (Akadur & Senkardes, 2021, p.183; Alonso et al., 2023; Steinmetz et al., 2021).

Steinmetz et al., (2021) discusses cryptocurrency awareness and ownership in 14 countries, including several European countries (Germany, France, Italy, Denmark, Spain, Belgium, Romania, Luxembourg), as well as Russia, Australia, Türkiye, UK, China, and the United States. Data indicates that there is a gender disparity regarding knowledge about and ownership of cryptocurrencies, with men being more knowledgeable and more likely to own cryptocurrencies than women. Based on the data mentioned by

Steinmetz in Europe, 55% of women have heard of cryptocurrencies, while 60% of women are interested in investing in cryptocurrencies. A Deutsche Postbank customer study, mentioned by Steinmetz, found that age groups 18–34, 35–54, and 55+ were all involved in buying or selling cryptocurrencies.¹⁸ The socioeconomic profile of cryptocurrency users in different countries is characterized by young age and male gender, which confirms the higher interest and greater knowledge among men (Steinmetz et al., 2021).

The data presented in the study (Steinmetz et al., 2021) show that higher education correlates with a greater awareness of cryptocurrencies. Education helps people understand the complexity of cryptocurrencies and recognize their potential, influencing them to invest in them. Moreover, better education correlates with higher income, which facilitates investing in cryptocurrency. Educational initiatives focusing on blockchain technology and cryptocurrencies could address knowledge gaps and potentially encourage wider adoption, including among women (Steinmetz et al., 2021).

¹⁷ These statistics do not represent the percentage of all women globally or nationally who invest in cryptocurrencies. The study, conducted by Akadur and Şenkardes (2021), surveyed 399 participants in Türkiye, comprising 230 women and 169 men. Among the female respondents, 75 out of 230 (32.6%) indicated that they had included cryptocurrencies in their investment portfolios. In contrast, 90 out of 169 male participants (53.2%) reported investing in cryptocurrencies. These findings highlight a gender disparity in cryptocurrency investment within the surveyed group. It is important to note that this study's sample was specific to Türkiye and may not be representative of global trends.

¹⁸ <https://www.financemagnates.com/cryptocurrency/news/almost-half-young-germans-interested-cryptocurrency-investment>

A significant percentage of women are unsure about how to best plan for their financial future (Chen et al., 2023). The lack of investment experience in traditional assets, financial services, and investment vehicles such as the stock market (Bucher-Koenen et al., 2021), and a general lack of knowledge about cryptocurrencies were reported as barriers to the acceptance and use of cryptocurrencies by women (Alonso et al., 2023). Chen et al., (2023) studied

factors influencing financial inclusion and gender equality in use of fintech services and products across 28 countries. Data shows that across the 28 countries examined, there is a gender gap in the use and adoption of fintech products (Chen et al., 2023). Women were generally more concerned about data privacy and the implications of sharing data with financial service and product providers for their personal safety (Chen et al., 2023). Alonso et al., (2023) suggest

that women should be educated about the uses and risks of cryptocurrencies. The Bahamas runs a country level CBDC training programme, which is aiming to accelerate education on digital financial services. Such training and education plans in digital finance can also be implemented at the regional level, especially focusing on lower income and education groups, since these groups usually have more difficulties with the digitization of finances.

Gender Gap Index in Participating Countries

The Global Gender Gap Index 2023 ranks gender equality in countries based on indicators such as economic participation and opportunity,

educational attainment, health and survival, and political empowerment. As the ranking increases, so does the disparity between men and women in

these areas (WEF, 2023). The rankings for the four countries focused on this study are:

Table 10

Education and economic participation and opportunity rankings.
Source: Global Gender Gap Index (World Economic Forum WEF, 2023).

Country	Overall ranking out of 146 countries (based on 4 indicators studied)	Economic participation and opportunity	Education	% of female STEM graduates
Armenia	61st	52nd	35th	39.81%
Azerbaijan	97th	27th	54th	35.10%
Georgia	76th	68th	28th	38.68%
Moldova	19th	3rd	53rd	30.52%

There is a gap in literature for international and comparative studies on access to and success in STEM fields in higher education (Lee et

al., 2021, p. 210). The countries from the South Caucasus, Eastern Neighbourhood region that this study targets – Armenia, Georgia,

Azerbaijan, and Moldova – have been under-explored. This is evident from a lack of academic or grey literature available on the topic.



Navigating the Intersection: Unveiling the Female Situation in Education, the Workforce, and Investments

Navigating the Intersection: Unveiling the Female Situation in Education, the Workforce, and Investments

In the intricate area of women's participation in the realms of education, work, and investments, a complex set of challenges and opportunities unfolds. It is therefore essential to delve into the intersection of these

critical domains in order to unveil the multifaceted situation faced by women. From educational pathways to professional landscapes and financial arenas, there is a need to understand the nuanced dynamics that shape the

female narrative. The goal is not only to identify obstacles, but also to illuminate potential synergies that may offer insights for catalysing positive change and fostering a more inclusive and equitable future.

ARMENIA

EDUCATION

In Armenia, women have a higher university enrollment rate than men, with 61.8% of women compared to 51.5% of men (Tovmasyan & Minasyan, 2019). Based on these statistics, it can be inferred that educational enrolment parity has been achieved in Armenia (Carter, 2021).

WOMEN IN THE WORKFORCE

The percentage of women in the workforce in Armenia is approximately 52.3% (WEF, 2023). According to the Statistical Committee of the Republic of Armenia, the gender pay gap is quite significant, with women earning 67.5% of what men earn on average. While there have been some improvements in closing the education gender gap, wage equality for similar work remains a concern (Tovmasyan & Minasyan, 2019).

Tovmasyan and Minasyan (2019) conducted a study on gender inequality in the workplace in Armenia. They found that women, who were the majority of survey respondents, perceived that they faced obstacles in professional career advancement due to gender inequality. Additionally, they reported experiencing discrimination both in their families and workplaces, citing issues such as work restrictions, bad attitudes, dress codes, and more. Moreover, 73% of the participants expressed the belief that it is wrong for women to be paid less than men for the same work.

Women face financial vulnerability when their husbands migrate. This is especially the case in rural areas, due to limited access to cars or other forms of mobility. Migration of husbands can also lead to increased responsibilities for childcare and elderly care, potentially making such households more vulnerable to poverty if husbands do not send remittances (Carter, 2021).

INVESTMENTS

The limited access in Armenia of rural women to land ownership¹⁹ impacts their economic empowerment (Carter, 2021). Moreover, domestic responsibilities and traditional gender norms limit women's involvement in economic decision-making (Carter, 2021).

A 2017 report by the Food and Agriculture Organization (FAO) highlighted that women in Armenia face challenges in accessing land ownership due to traditional inheritance practices and limited access to credit. While exact percentages were not provided, the report emphasized the gender disparity in land ownership. Despite formal legal provisions guaranteeing equal land rights, most land in Armenia is registered and managed by men, significantly limiting women's de facto enjoyment of land ownership. Several socio-cultural and systemic barriers contribute to this disparity.

19 Available data indicates that women in Armenia own a significantly smaller proportion of land compared to men. "Secure tenure rights to land, by sex: 16% of women in Armenia own land compared to 35% of men (2015), which is down from 39% of women in 2010. Among women who own land, 32% do so in rural areas compared to 5% in urban areas; 26% of women aged 45–49 own land compared to 10% of women aged 15–19." <https://eca.unwomen.org/sites/default/files/Field%20Office%20ECA/Attachments/Publications/2020/05/Gender%20equality%20and%20SDGs%20Armenia.pdf>

Registry practices favoured male “heads of households” during initial land distributions.²⁰ Patrilocal marriage traditions discourage women from asserting land rights, while inheritance customs typically prioritize male heirs. A general lack of awareness about women’s land rights among

rural communities and officials further compounds the issue. These limitations restrict women’s ability to participate in land-related decision-making, access agricultural services, or use land as collateral for financial opportunities. The absence of sex-disaggregated data on land registration obscures the

full scope of the problem, although only 26.5% of rural households are headed by women, which indicates a gender gap in land ownership and control. Addressing these challenges is essential for advancing gender equality in rural development and economic empowerment.²¹

AZERBAIJAN

EDUCATION

Gebel (2020) has studied the labour market integration of young women in Azerbaijan, Georgia, and Tajikistan. Cultural and institutional similarities can be found among the three countries, since they share a Soviet legacy. The study reveals that women who hold higher education certificates, especially in professional and tertiary education, have a greater likelihood of accessing formal job opportunities. The population is more inclined towards vocational training, since the tertiary education route is more exclusive and expensive. Data suggests that higher education significantly increases the chances of young women securing formal sector jobs in Azerbaijan (Gebel, 2020).

Azerbaijan’s public spending on education is lower than that of neighboring countries like Armenia, Georgia, and Kazakhstan (Ismayilov et al., 2022). Various studies suggest that there is a positive correlation between women’s education and their wages in Azerbaijan (Ismayilov et al., 2022). As a result of national legal reforms, educational enrollment parity has been achieved for women (Carter, 2021). The gender equality index in education indicates that almost 50% of students enrolled in state and non-state

higher educational institutions for the 2022/2023 academic year were women (State Statistical Committee of the Republic of Azerbaijan, 2023, pp. 134–135). Only 40.3% of these female students were enrolled in technical and technological specialties in both state-funded and non-state higher educational institutions. It can therefore be inferred that women’s future participation in tech-related fields will be comparatively lower. Most women are enrolled in education, culture and art, and natural science programmes (State Statistical Committee of the Republic of Azerbaijan, 2023). This difference in the choice of study programmes and the caregiving role of women in the family leads to the gender wage gap (Ismayilov et al., 2022).

WOMEN IN THE WORKFORCE

Gender equality has become an increasing focus for Azerbaijan, reflected in both national legislation and strategic policy efforts aimed at empowering women and eliminating discriminatory practices (State Statistical Committee of the Republic of Azerbaijan, 2023). Notable progress has been made in reforming laws to support gender parity across

sectors (Carter, 2021). As of 2023, women constitute 61.9% of the total female population and 71.4% of the working-age female population actively engaged in the labour force in Azerbaijan (State Statistical Committee of the Republic of Azerbaijan, 2023), suggesting higher female workforce participation compared to some global averages. However, women’s representation in specific sectors, particularly science, technology, engineering, and mathematics (STEM), remains uneven and under-documented at the national level, pointing to a potential area for targeted gender policy interventions in the evolving digital and innovation economies. However, Gebel (2020) found that 40% of women do not enter the labour market after graduation in Azerbaijan since they get married early and switch to full-time housework due to gender norms and stereotypes. Women, particularly working mothers, choose lower-paid public jobs to allow them to combine domestic tasks with their work duties and are unlikely to have time to join after-work educational or networking opportunities, affecting their chances of promotion (Carter, 2021).

The higher percentage of non-working women in Muslim-majority Azerbaijan is in line with other Muslim majority countries with similar demographics,

20 The statement that “registry practices favoured male ‘heads of households’ during initial land distributions in Armenia” is substantiated by a report from the Food and Agriculture Organization (FAO) titled *Rural Women’s Participation in Decision-Making in Armenia*, presented at the Ninth Session of the Working Party on Women and the Family in Rural Development, held in Yerevan from 30 September to 3 October 1998. The report notes that during the land privatization process initiated in 1991, the head of the household was designated as the owner of the farm. Traditionally, in Armenian families, the head of the household was considered to be the oldest member, which, in most cases, resulted in males becoming the registered owners of the newly privatized land. This practice effectively favored male ownership and limited women’s direct access to land titles. <https://www.fao.org/UNFAO/Bodies/ECA/WPW/9WPWARM.HTM>

21 <https://openknowledge.fao.org/server/api/core/bitstreams/8af783d3-0d89-43ca-a1bb-4b8411249402/content>

like Tajikistan (Gebel, 2020). In rural areas, the ratio of women not participating in the formal workforce is even higher. Nonetheless, female employment is growing in the formal sector in Azerbaijan (Gebel, 2020).

Women are largely excluded from high-paying sectors, such as finance (Ismayilov et al., 2022). Data reveals that women are prominently represented in specific technical sectors, such as information and communication, where 80.6% of employees are women, and in professional, scientific, and technical activities, where 49.4% of employees are women. These findings suggest that these fields offer more opportunities for women in technical

roles. At the same time, however, a wage gap exists in the female dominated field of information and communication, with women earning monthly on average AZN 1 149.00 (ca. EUR 595) while men earn AZN 1 425.40 (ca. EUR 738) (State Statistical Committee of the Republic of Azerbaijan, 2023). In almost every sector, women earn less than men (Ismayilov et al., 2022). The wage gap expands with increased levels of education (Ismayilov et al., 2022).

INVESTMENTS

In Azerbaijan and Georgia, the transition from socialism to capitalism with the fall of the Soviet Union

has led to labour market problems and economic uncertainties for young people, including women. Lifetime employment opportunities guaranteeing basic economic security no longer exist (Gebel, 2020). Statistics from 2022 show that women in Azerbaijan spend their income on consumption expenditures, such as 43.9% on food, 6.0% on clothes and footwear, 7.8% on housing, water, electricity, gas, and other fuels, and so on. Income from employment or self-employment comprises 64.2% of the total income of women (State Statistical Committee of the Republic of Azerbaijan, 2023). This information suggests that women do have disposable income for potential investments.

GEORGIA

EDUCATION

Georgian women have almost achieved educational parity in education completion rates (Carter, 2021). There is a gendered subject concentration in tertiary education, meaning that women and men tend to study different subjects (Carter, 2021).

Employers do not trust women's formal education certificates/diplomas, which impacts their remuneration (ILO, 2022). Instead, they trust the training that they provide themselves within the company. This shows the need to expand formal education programmes to include on-the-job training (ILO, 2022).

The effects of education on the probability of young women getting a job in the formal sector is higher if they hold advanced degrees such as an MA or a PhD. However, the large number of individuals in Georgia with higher education degrees has led to a devaluation of those degrees in the labour market (Gebel, 2020). Ethnic minorities and rural job applicants face discrimination for employment. Also, women coming from richer families

have a higher probability of gaining access to the formal job sector than those from poorer families (Gebel, 2020). Women belonging to ethnic minorities in rural areas face increased vulnerability to domestic violence, child marriage, early pregnancy, and high education dropout rates (Carter, 2021).

WOMEN IN THE WORKFORCE

In Georgia, women account for 47.1.% of the workforce (WEF, 2023). In contrast to Azerbaijan, Georgia, as an Orthodox Christian country, has a different work culture (Gebel, 2020). Gebel (2020) found that 26% of women do not enter the labour market after graduation in Georgia. There is a dip in female labour force participation during childbearing years (Carter, 2021). The gender wage gap is 36.2%, but appears to be narrowing. From 2008 to 2020, the employment level among men consistently exceeded that of women. Women are paid less than men, especially in the financial and insurance sectors. This gap is attributed to the unequal

distribution of family obligations, the lack of part-time job opportunities for women with family obligations, and the need for policies to ensure equal pay for equal work (ILO, 2022). The dominant cultural perception in the country also influences women's participation in the workforce, since a majority of the population believes that men should work and women should take care of the household and children (ILO, 2022).

Women's educational enrollment parity in Georgia has not led to gender-balanced labour market outcomes, and occupational segregation still exists (Carter, 2021). The National Statistics Office of Georgia does not publish data on employment in various sectors disaggregated by sex, which makes it difficult for policymakers to assess the situation and develop evidence-based policies (ILO, 2022).

GOVERNMENTAL POLICY INTERVENTIONS

The government of Georgia has implemented several policies to

promote gender equality and reduce informal employment, including encouraging women to occupy more managerial positions, introducing quotas for female representation in State bodies, and requiring companies to address the gender wage gap to participate in state tenders. Additionally, the government aims to move informally employed persons to the formal sector by offering social guarantees, labour rights protection, tax benefits, and introducing part-time jobs (ILO, 2022).

The government is running campaigns aimed to prevent gender-based discrimination in companies, encourage the fair distribution of household tasks, protect the labour rights of workers, bridge the gap between traditional gender roles, and raise awareness among judges, defense lawyers, and labour inspectors regarding gender equality (ILO, 2022).

Policy instruments such as minimum wages and progressive income tax, as well as mandatory anti-discriminatory policies for companies, may contribute to ensuring equal wages for men and women. Additionally, introducing quotas for women in State bodies could encourage women to occupy more managerial positions which would narrow the wage gap (ILO, 2022).

Female representation in State bodies has received a setback, however. In April 2024, Georgia's parliament, led by the ruling Georgian Dream party, abolished the mandatory gender quotas for women on party electoral lists. Previously, the Electoral Code required that at least one in every four candidates on a party list be a woman. The abolition was enacted swiftly, with 85 MPs voting in favour

and 22 against. Despite President Salome Zourabichvili's veto, parliament overrode it on 15 May 2024.²²

This legislative change aligns with the Georgian Dream party's broader agenda to emphasize "traditional family values." In March 2024, the party initiated constitutional amendments aimed at "protecting family values," signaling a commitment to uphold these principles in future legislation.²³

The Organization for Security and Co-operation in Europe (OSCE) has expressed concerns that the removal of gender quotas contradicts international human rights standards and may hinder progress toward gender equality in Georgia's political landscape.²⁴

INVESTMENTS AND FINANCIAL LITERACY

The financial literacy level in Georgia is quite low, as measured by the Asian Development Bank Institute.²⁵ Its study revealed that there are regional disparities in financial literacy, with higher levels observed in the capital city of Tbilisi. Furthermore, participants with higher education levels scored better in financial literacy. The National Strategy for Financial Education in Georgia, developed by the National Bank of Georgia, aims to improve financial literacy by raising awareness of the benefits of financial education (Babych, Grigolia, and Keshelava, 2018).

Data shows that women have a higher rate (63.6%) of deposit or savings accounts compared to men in Georgia. This is higher than in other low middle-income countries and also higher than in Europe and the Central

Asia region (Babych et al., 2018). Although these bank deposits cannot directly be considered investments, it can be inferred that women do have the funds for investments, since they have a higher rate of savings than men. This could indicate a potential for investment among women in Georgia.

In contrast, women in Georgia have limited access to land ownership, in part because marriages are not officially registered, which causes inheritance problems (Carter, 2021). Women in the workplace face a glass ceiling that affects women's economic empowerment (Carter, 2021). Due to the gender pay gap and women's lower level of participation in the workforce, it can be inferred that women in Georgia may have less opportunity to invest due to lower income and employment opportunities, which in turn means they lack the financial stability needed for investments.

A study by Dilanchiev et al., (2022) has revealed a positive relationship between future reward, innovativeness, knowledge, and cryptocurrency adoption in Georgia. The study highlights that the desire to purchase cryptocurrencies is influenced by risk considerations in standard finance markets, the prospect of future reward, knowledge about cryptocurrency, and personal innovativeness. Notably, the study does not provide a gender-based breakdown of its findings.

Georgia has evolved its regulatory framework concerning virtual assets, and VASPs, moving from an initial phase of limited regulation towards structured and comprehensive approach, developing a structured regulatory and supervisory framework aligned with international standards

22 <https://georgiatoday.ge/georgian-dream-abolishes-the-rule-of-gender-quota-in-the-party-list>

23 <https://iep-berlin.de/site/assets/files/4179/policy-memo-82-3.pdf>

24 https://www.osce.org/files/f/documents/7/4/571702_0.pdf

25 "For households, the main concern is not so much the access to credit, but rather low levels of income, low levels of savings, provision for retirement, and low levels of financial literacy." Babych, Yaroslava, Maya Grigolia, and Davit Keshelava. *Financial Inclusion, Financial Literacy, and Financial Education in Georgia*. ADBI Working Paper No. 849. Tokyo: Asian Development Bank Institute, 2018, p. 23. <https://www.adb.org/sites/default/files/publication/428771/adbi-wp849.pdf>

and best practices. In 2022, the parliament of Georgia passed the respective legislative changes, whilst in 2023 the National Bank of Georgia (NBG) introduced the VASP registration requirements including Fit and Proper Checks, AML/CFT Policy Procedures, AML/CFT Risk Assessment, etc.

Under current Georgian legislation, the Convertible Virtual Assets are defined as the one that have an equivalent value on the market, in national or foreign currency, in another virtual asset, and/or a financial instrument in which it can be exchanged, hence, classified as fungible assets. This classification distinguishes them

from non-fungible tokens (NFTs) and digital collectibles, which, due to their non-fungible nature and unique characteristics, fall outside the scope of the new regulatory framework.

While Virtual Assets are still not recognized as legal tender, they are not prohibited. The NBG continues to caution users about the risks associated with crypto-assets, especially their volatility and lack of consumer protections.

The government has been an early adopter of blockchain technology in public services, particularly for land and property registration through

the national agency for public registry (Babych et al., 2018). These developments mark Georgia's gradual move toward a regulated, innovation-friendly virtual asset ecosystem.

The limited use of fintech products and services like internet and mobile banking in Georgia has increased the cost of doing business for banks. Despite the availability of new ventures like person-to-person lending platforms and crowdfunding, adoption rates have been low. However, with more young people entering the job market, the use of these financial technologies is expected to increase rapidly (Babych et al., 2018, p. 13).

MOLDOVA

WOMEN IN THE WORKFORCE

Moldova ranks higher in terms of gender equality when compared to Georgia, Armenia, and Azerbaijan (Carter, 2021). Women account for 77% of the workforce in Moldova (WEF, 2023). However, discriminatory gender and social norms prevalent in Moldova contribute to the perpetuation of traditional gender roles and inequalities (Carter, 2021). Naval and Colesnicova (2020) found evidence of gender inequality in the labour market in Moldova, but they also state that the country has made significant progress in gender equality (UN Women, Moldova, 2022). To address gender disparities, especially in the labour market, steps are being taken to improve pay policies and implement measures to ensure equal access to job opportunities for women (Center Partnership for Development, 2021). The unemployment rate of women, particularly in marginalized communities, remains high due to discrimination and stereotypes. As of 2021, only 36.4% of women from marginalized communities were part of the workforce according to Moldova's National Bureau of Statistics (UN Women, Moldova, 2022).

The percentage of women in the workforce varies by age, region, and social group. The employment rate of young women was 43% in 2020. Women's involvement in the workforce reaches the lowest levels for women who are of reproductive age (15–34 years old) and in retirement (55+ years old). Women from rural areas have an employment rate of approximately 32%, as compared to 44% in urban areas. This difference is mainly because rural women have unpaid caregiving responsibilities. Women are underrepresented in higher-paying male-dominated sectors and are more likely to seek lower-paying or part-time jobs because of interruptions in their careers caused by childbirth and childcare responsibilities (Center Partnership for Development, 2021). Women are also underrepresented at senior management levels (Carter, 2021).

Recently, a new trend of "feminization" of labour migration has been noticed, with increasing numbers of women migrating for work from Georgia and Moldova in response to a lack of local economic opportunities in their home countries (Carter, 2021). This has led to a significant shift in traditional

gender roles. In Moldova, half of the country's 1.4 million workforce is now working abroad. (Carter, 2021).

GENDER PAY GAP

Concerning the gender pay gap, a study has indicated that there is not much variation of the earnings of women in different job roles; men's earnings show more variation (Naval & Colesnicova, 2020). The gender pay gap in Moldova is significant, with women currently earning an average of 25% less than men. This gap is only partially explained by objective factors, such as differences in experience and education. The gender pay gap has been increasing: in 2020, the gap was estimated at 13.7%. As a result, women's financial losses are substantial, with women needing to work approximately two months longer than men to reach the average annual salary. This inequality is further exacerbated by the underrepresentation of women in top management positions and higher-paying sectors (Center Partnership for Development, 2021).

WOMEN IN STEM EDUCATION

Women make up the majority of Moldova's workforce (WEF, 2023), but their education level is half that of men. (Naval & Colesnicova, 2020). Women in Moldova tend to choose education in disciplines that are considered more feminine, such as pedagogy or liberal arts subjects like philology, political science, social sciences, and social assistance. These areas are usually less well paid than STEM subjects, which have higher male enrollment (Center Partnership for Development, 2021).

A 2020 study by UN Women identified several key factors that shape the decision of women to study in STEM fields,²⁶ including parental encouragement, the reputation of higher education institutions, financial ability, and awareness of career opportunities in STEM fields. Still, less than 20% of female respondents of the UN Women survey²⁷ actually knew about programmes and opportunities aimed at improving their knowledge and abilities in STEM areas. The share of women who choose to study information and communication technology (ICT) has increased slightly from 2017 to 2020, but overall, women are underrepresented in these technical fields and face challenges when choosing to pursue careers in these fields (Center Partnership for Development, 2021).

Moldova has a strong representation of women in STEM education of 30.5% (WEF, 2023).²⁸ However, women are significantly underrepresented in the ICT sector, with only 4.6% of girls in higher education pursuing ICT fields. Consequently, while women and girls

make up 31% of the ICT general workforce, they represent just 19% of digital professionals. Additionally, women in the sector earn 33% less than their male counterparts. However, there has been positive progress: the number of women-owned businesses in the ICT sector is growing faster than those owned by men. Women entrepreneurs now account for 67% of businesses in IT, compared to 56% of male entrepreneurs. Despite these advancements, gender disparities remain at the management levels in small, medium, and large enterprises.²⁹ Significant improvements are still needed to bridge gender gaps, especially at senior management levels

To foster greater participation and to support women's ICT aspirations, initiatives such as the GirlsGoIT programme and Empowering Women in ICT Skills have been launched, establishing girls-led local clubs across 13 regions in Moldova and providing resources to empower women in ICT. UN Women has run the GirlsGoIT initiative since 2015 – it provides professional training and digital re-qualification programmes. Another initiative is to establish Women Hubs, which serve as collaborative workspaces to foster networking opportunities and deliver professional support (UN Women, Moldova, 2022).

WOMEN IN THE STEM WORKFORCE

While the percentage of female STEM graduates entering STEM employment is increasing, the numbers on STEM university graduates entering the labour market show that the retention of women in STEM even one year after graduating sees a significant drop.

This indicates that although Moldova is making progress in promoting gender equality in STEM education and employment, there are still challenges in retaining women in the STEM workforce (WEF, 2023).

FINANCIAL LITERACY AND INVESTMENTS

UN Women is aiming to address the financial literacy gap, especially among the underrepresented population (UN Women, Moldova, 2022). This is important since women in Moldova invest more in businesses that they have started themselves, with 62.6% of women-owned businesses being launched based on their own idea. Over 50% of these businesses are started with grants (Center Partnership for Development, 2021).

Women's financial well-being in Moldova is tied to the agricultural sector as contributing family workers and labour migration (Carter, 2021). Many women serve as contributing family workers with limited access to formal employment benefits, financial decision-making power, or individual income. This dependency often reinforces traditional gender roles and restricts women's ability to accumulate assets or invest independently. Additionally, a significant number of Moldovan women engage in labour migration, particularly to European countries, where they may take on low-wage, informal jobs. Migrant female workers from Moldova typically seek employment in countries like Italy, Türkiye, and Israel, according to the 2013 Labour Force Survey.³⁰ The rising number of migrant women workers from Moldova reflects a combination of factors: reduced

²⁶ <https://moldova.unwomen.org/en/biblioteca-digitala/publicatii/2020/08/women-in-ict-and-stem>

²⁷ "This Survey was elaborated by Magenta Consulting for the Association for the Development of Information Technologies EDUCAT in partnership with the United Nations Entity for Gender Equality and Women's Empowerment (UN Women) and financed by Sweden." <https://moldova.unwomen.org/sites/default/files/Field%20Office%20Moldova/Attachments/Publications/2020/EN%20GGGITReport%20FINAL240820.pdf>

²⁸ https://www3.weforum.org/docs/WEF_GGGR_2023.pdf (Global Gender Gap Report 2023 p. 262)

²⁹ <https://www.undp.org/sites/g/files/zskgke326/files/migration/md/Digital-MOLDOVA-ENG.pdf>

³⁰ Labour force in the Republic of Moldova. Employment and unemployment, 2014. https://statistica.gov.md/index.php/en/labour-force-in-the-republic-of-moldova-employment-and-unemployment-in-2014-9430_2553.html

migration costs and risks, significant income disparities between Moldova and destination countries, limited access to well-paid, appealing job opportunities at home, and growing success in overcoming language and cultural barriers. These conditions have collectively driven a substantial wave of labour migration among Moldovan women, particularly from rural regions.³¹

While remittances sent home can contribute to household income, they rarely translate into long-term financial security or investment in financial products due to limited

financial literacy and access to formal financial services. This combination of informal agricultural work and migration-related economic activity creates structural challenges for women in building financial resilience, increasing their reliance on informal networks and limiting their participation in formal investment or savings schemes. A 2023 workshop organized by International Organization for Migration (IOM) Moldova and the Association of Moldovan Commercial Banks highlighted that while remittances constitute a significant portion of Moldova's GDP, they are

predominantly used for consumption rather than savings or investments. This trend is attributed to limited financial services tailored for migrants and a general lack of financial education among this group.³²

The International Fund for Agricultural Development (IFAD) report 2021 notes that many rural Moldovan households receive remittances informally and often store funds at home. These remittances are primarily used for immediate needs, with minimal investment in long-term financial products, indicating challenges in financial inclusion and literacy.³³

31 <https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/Library/Publications/2016/30-Gender-migration-and-development-in-the-Republic-of-Moldova-2016-en.pdf>

32 <https://moldova.iom.int/news/iom-advances-work-enhance-financial-literacy-moldovan-migrants>

33 <https://www.ifad.org/en/w/rural-voices/helping-remittances-reach-rural-areas-in-moldova>

Understanding the Current Landscape

Understanding the Current Landscape

As cryptocurrency adoption accelerates globally, understanding who owns and uses digital assets is essential for addressing existing disparities. This section outlines key trends in crypto ownership as based on demographics, geography, and usage patterns. It also highlights those elements needed for inclusive growth in the digital finance ecosystem.

To effectively address the gender gap in the ownership and use of cryptocurrencies, it is essential to also understand the broader

socio-economic and technological context in which this gap exists. This section provides an overview of the current landscape in the South Caucasus – Armenia, Azerbaijan, and Georgia – as well as in Moldova, examining key factors such as digital infrastructure, financial inclusion, regulatory frameworks, and gender dynamics. By analysing these foundational elements, we can gain deeper insight into the opportunities and barriers that shape women's participation in the crypto economy across the region.

Recent research into the adoption of cryptocurrency and decentralized finance (DeFi) underscores the importance of social, economic, and cultural factors over purely technological or political ones. These interdependent determinants shape how different countries embrace blockchain technologies, revealing that broader societal dynamics also play a role in influencing crypto adoption trends. This insight is particularly relevant when assessing regional disparities in the South Caucasus and Moldova.³⁴

Cryptocurrency Ownership Worldwide

Global cryptocurrency adoption continues its rapid ascent, with over 562 million individuals – approximately 6.8% of the global population – owning digital assets in 2024 according to a Triple-A report.³⁵ This represents a substantial increase from previous years, which highlights the transition of cryptocurrencies from a niche interest to a mainstream financial instrument.

Demographically, cryptocurrency owners tend to be younger (ages 25–34), highly educated, and technologically literate, with many working in professional or tech-related sectors. Ownership is most concentrated in Asia and North America. In population percentage

terms, the leading countries are the United Arab Emirates (25.3 %), Singapore (24.4%), and Türkiye (19.3%). Usage varies by region – from investment and daily transactions, to serving as a store of value in economically unstable countries.

The data found in the Triple-A report show that while the crypto space remains male-dominated (61% men vs. 39% women), the gender gap is narrowing, especially among the youngest users (ages 18–24). This shift suggests that targeted education, increased financial literacy, and access to technology are enabling greater female participation in Web 3.0 ecosystems.

In terms of behaviour, crypto is primarily used for investment purposes, but there is growing adoption for payments and as a hedge against inflation in countries with economic volatility. The rise of mobile trading platforms and broader acceptance of crypto in retail and services also reflect deeper integration of digital assets into everyday life.

The evolving global landscape demonstrates a dynamic and diverse crypto user base. This signals a critical opportunity for advancing gender equity through inclusive design, policy, and access to education and tools in the Web 3.0 economy.

³⁴ <https://www.sciencedirect.com/science/article/pii/S0040162524000404>

³⁵ <https://www.triple-a.io/cryptocurrency-ownership-data>

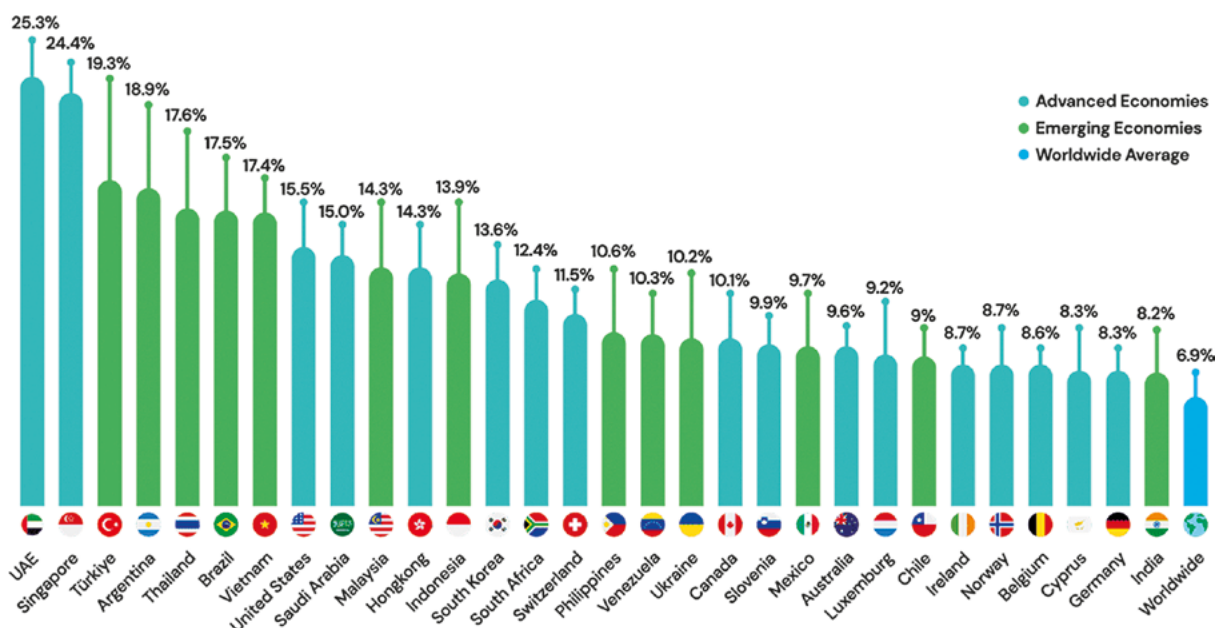


Table 11

Over 560 million cryptocurrency owners worldwide³⁶

Virtual Asset Regulations in OSCE Participating States

ARMENIA

In February 2025, the Armenian government took its first major step toward regulating the cryptocurrency sector by instating a comprehensive crypto asset regulation bill. This landmark legislation introduces a legal framework aimed at providing structure, transparency, and oversight to the country's growing digital asset ecosystem.

Driven by the rising circulation of crypto assets both globally and domestically, the new law seeks to address legal uncertainties that have impacted businesses, investors, and public institutions engaging with digital assets. Finance Minister Vahe Hovhannisyán

emphasized that the absence of clear regulations had hindered co-operation between service providers and government bodies, while also exposing the financial system to significant risks such as money laundering, terrorist financing, and fraud.³⁷

The regulation grants the Central Bank of Armenia the authority to collect data on crypto-related activities and to take action to mitigate financial crimes. It also establishes protective measures for customers, aims at ensuring fair market conduct, and enhances financial stability through transparent and accountable practices.

While acknowledging that the regulation is not without flaws, Prime

Minister Nikol Pashinyan stressed the importance of timely action over perfection.³⁸ The law is seen as a foundational move, with future amendments expected as Armenia deepens its understanding of crypto technologies and aligns with global best practices.

This legislative development reflects Armenia's broader commitment to building a regulated and inclusive digital finance environment. In doing so, it also lays the groundwork for improved public trust and broader participation in the crypto economy – including by women and other underrepresented groups – by fostering a safer and more accessible financial landscape.

³⁶ <https://www.triple-a.io/cryptocurrency-ownership-data>

³⁷ <https://www.thearmenianreport.com/post/armenian-government-approves-major-crypto-regulation-bill>

³⁸ <https://arka.am/en/news/business/government-makes-its-first-attempt-to-regulate-the-cryptosphere/>

AZERBAIJAN

Azerbaijan is in the early stages of developing a comprehensive regulatory framework for virtual assets and virtual asset service providers (VASPs), as part of its 2024–2026 Financial Market Development Strategy. Led by the Central Bank of Azerbaijan (CBA), this initiative aims to formalize oversight of the virtual asset sector, including the creation of a legal foundation for regulating VASPs and distributed ledger technologies.

Currently, cryptocurrencies are not recognized as legal tender in Azerbaijan, and there is no existing legal framework governing their circulation. However, the rising interest in digital assets among individuals and entrepreneurs has prompted national conversations regarding taxation, regulation, and transparency. Authorities are exploring how to align emerging policies with global best practices, particularly in areas such as consumer protection, income taxation, and digital financial infrastructure.

Recent forums like “Chain Reaction 2024” have highlighted the Government’s growing interest in blockchain, Web 3.0, and digital innovation. These events have emphasized the importance of balancing innovation with regulatory clarity and public trust, with international experts advocating for proactive engagement and inclusive legal design.

During the VIIIth International Banking Forum held in Baku on 3 December 2024, Gunay Mahmudova, a representative of the CBA, announced that the CBA is actively drafting a new law aimed at regulating the activities of virtual assets and their associated service providers.³⁹ This initiative is part of a broader effort to establish a robust legal framework for Azerbaijan’s

evolving digital finance ecosystem. As the CBA works toward establishing functional requirements for banks and integrating digital assets into broader monetary policy discussions, Azerbaijan is positioning itself to create a more structured and secure digital economy. These reforms are expected to foster consumer confidence and increase financial transparency, which will create an enabling environment for inclusive participation in the virtual asset space.

Importantly, the development of a clear and inclusive regulatory framework holds the potential to address gender-based disparities in cryptocurrency adoption and use. By improving accessibility, trust, and legal protection, these efforts may help ensure broader participation – particularly for women and other underrepresented groups – in Azerbaijan’s evolving digital finance ecosystem.⁴⁰

GEORGIA

Georgia is rapidly evolving its institutional and regulatory landscape to support innovation in financial technologies, including virtual assets. Public sector institutions have adopted a generally pro-innovation stance, which is contributing to a growing fintech ecosystem. As part of its national Fintech Strategy, Georgia is working to enhance inter-agency co-ordination and establish a unified governance framework. For example, it has proposed the creation of an Interinstitutional Fintech Committee to formalize co-operation and strategic oversight.

The National Bank of Georgia (NBG), the country’s primary financial regulator (excluding insurance and leasing), is playing a central role in this transformation. It has introduced key regulatory reforms, such as digital bank

licensing, open banking frameworks, and most notably, a registration and oversight regime for VASPs. Since 2023, VASPs fall under the NBG’s anti-money laundering and counter-financing of terrorism (AML/CFT) supervision. This covers a broad range of activities, including crypto exchanges, wallets, initial coin offerings (ICOs), portfolio management, and crypto lending.

While the current VASP regime addresses basic AML/CFT risks, Georgian authorities recognize the need for a more comprehensive regulatory framework that aligns with global standards. Ongoing initiatives include developing a regulatory roadmap for crypto-assets, with an emphasis on consumer protection and legal clarity regarding tokenization. Broader priorities also include enhancing cybersecurity supervision, managing fintech-related fraud, and exploring the application of artificial intelligence in regulatory processes.

Georgia’s progressive approach – guided by international standards such as those from the Financial Action Task Force (FATF) and Financial Stability Board (FSB) – positions it as a regional leader in shaping a secure, inclusive, and innovation-friendly virtual asset environment.⁴¹

MOLDOVA

Moldova maintains a restrictive regulatory stance on cryptocurrency, prohibiting its use for payments and transactions, despite permitting ownership and conversion through licensed exchanges. Additionally, crypto mining is banned due to the country’s ongoing energy crisis. Despite these limitations, interest in digital assets is gradually increasing, particularly among younger, tech-savvy individuals and those seeking more affordable remittance solutions.

39 <https://en.trend.az/azerbaijan/business/3978069.html>

40 <https://www.azernews.az/analysis/231117.html>

41 https://nbg.gov.ge/fm/ზედადგეგვლობა/ფინტექი_დეპარტამენტი/strategia/fintech-development-strategy-of-georgia.pdf

One of the major challenges to broader adoption is the country's regulatory environment. Until very recently, the government has enforced strict anti-crypto policies, citing concerns regarding financial stability, money laundering, and cybersecurity. These policies created significant barriers for both consumers and potential service providers. Moreover, financial literacy gaps persist, with many Moldovans remaining skeptical of cryptocurrencies due to limited understanding of the technology and its potential applications.

Access to digital assets is further hindered by underdeveloped infrastructure. In rural areas, low internet penetration and outdated technological systems prevent large segments of the population from engaging in the digital economy. The broader economic context also contributes to cautious adoption. Moldova's fragile economy, coupled with the inherent volatility of cryptocurrencies, makes such assets less attractive to risk-averse individuals.

Despite these challenges, digital assets offer several potential benefits for Moldova. Cryptocurrencies could enhance financial inclusion by providing access to financial services for unbanked communities. They also present a compelling alternative for international remittances, offering lower transaction costs compared to traditional money transfer services – a particularly relevant use given the size of Moldova's diaspora. In the long term, blockchain technology could support economic diversification, reducing dependence on agriculture and remittances by fostering innovation in other sectors. Additionally, cryptocurrencies may serve as a hedge against inflation and currency devaluation, offering a level of financial protection in times of economic instability.

To realize these benefits, Moldova would need to develop a clearer regulatory framework, expand digital infrastructure, and invest in financial literacy programmes. Integrating blockchain solutions into public services and remittance systems could pave the way for a more resilient and inclusive

financial landscape. Although current restrictions limit widespread adoption, Moldova's growing curiosity about digital assets signals a potential future shift toward a more open and innovative approach to financial technology.

As of 2025, Moldova is progressively adopting a crypto regulatory environment, signaling a shift toward greater openness and engagement with virtual assets. Recent developments include the designation of Moldova's Financial Intelligence Unit (FIU) as the primary authority for overseeing cryptocurrency regulation. This move marks a significant step toward aligning Moldova's financial oversight with international standards for transparency and anti-money laundering (AML) practices. To support this transition, the OSCE has been assigned to provide assistance and capacity-building support. These developments reflect Moldova's growing recognition of the potential benefits and risks associated with digital assets and its commitment to developing a compliant, secure, and innovation-driven crypto market.

The Role of the Public Sector in OSCE Participating States

The public sector plays a critical role in shaping the landscape of cryptocurrency adoption and ensuring equitable access to digital financial tools. In the context of OSCE participating States, government institutions, regulators, and central banks have significant influence over how virtual assets are perceived, regulated, and integrated into national economies. The following section explores the approaches being taken by various public sector actors in advancing – or hindering – cryptocurrency development, with a particular focus on how policies and initiatives impact gender inclusion and

financial empowerment in the digital asset space.

ARMENIA – Advancing Financial Inclusion

In Armenia, the public sector has played a pivotal role in advancing gender equality through targeted financial education initiatives. A recent series of financial literacy training sessions held in Yerevan, Vanadzor, and Gyumri empowered 54 women-led small and medium-sized enterprises (SMEs) with practical financial skills. Organized by ARFIN UCO in

partnership with the European Bank for Reconstruction and Development (EBRD), with support from Optimise Consulting and funding from the European Union, the programme⁴² focused on budgeting, financial planning, investment strategies, and access to finance.

The initiative not only equipped women entrepreneurs with the tools to better manage and grow their businesses, but also fostered peer learning, confidence, and collaboration. Participants reported being able to adopt new financial practices and having a deeper understanding of

⁴² <https://banks.am/en/news/newsfeed/28715>

business fundamentals, including the separation of personal and business finances. The training courses were part of the EBRD's broader commitment to inclusive economic development, underscoring the public sector's essential role in creating enabling environments for women's entrepreneurship and laying a foundation for their greater inclusion in both traditional finance and emerging digital asset spaces.

Another example of the public sector being a driving force behind efforts to enhance financial inclusion was the meeting held in Dilijan, Armenia, in 2024 by the Expert Group on Financial Inclusion Policy (EGFIP) under the Eastern Europe and Central Asia Policy Initiative (ECAPI), co-hosted by the Central Bank of Armenia.⁴² The event marked the group's first in-person regional meeting since 2019. It served as a platform for policymakers and central bankers from Armenia, Kazakhstan, Mongolia, North Macedonia, Tajikistan, Uzbekistan and others to co-ordinate inclusive finance strategies.

Participants discussed the implementation of the ECAPI's 2024–2028 workplan, with a focus on consumer protection, inclusive green finance, and bridging financial inclusion gaps. The meeting highlighted the vital role of cross-border collaboration in promoting inclusive policies and demonstrated the public sector's ongoing commitment to addressing structural challenges in financial access, particularly for underrepresented groups such as women. Armenia's hosting of the event reinforced its leadership in advancing inclusive financial policy, while the contributions of regional and international experts underscored the importance of knowledge exchange

in responding to evolving financial landscapes. These efforts are especially relevant as digital finance expands, as this will offer opportunities to ensure that women are not left behind in the growth of fintech.

azerbaijan – Supporting Financial Education

In her address during the Ring the Bell for Gender Equality event on International Women's Day 2025, Parvana Bayramova, a programme specialist at UN Women Azerbaijan, emphasized that gender inequality remains one of the world's most pressing human rights issues.⁴⁴ Bayramova highlighted the essential role of economic empowerment in achieving gender equality, underscoring that without increasing women's access to economic opportunities, true gender parity cannot be realized. She called for targeted measures, including equal pay for equal work and non-discrimination, to drive this progress. Bayramova also pointed out that national socio-economic development priorities for 2030, as outlined by the president of Azerbaijan, prioritize the enhancement of women's economic participation. The public sector plays a key role in supporting these initiatives, alongside the private sector's responsibility to adopt frameworks that promote gender equality. She noted that since the UN introduced the Principles for the Empowerment of Women in 2010, 38 local companies in Azerbaijan have adopted these principles, with efforts underway to attract an additional 20 companies.

Launched in 2015 by the UN Sustainable Stock Exchanges (SSE), UN Global Compact, and UN Women, the initiative Ring the Bell for Gender

Equality⁴⁵ began with just seven participating exchanges. By 2016, the collaboration had expanded to include partners such as the IFC and the World Federation of Exchanges. By 2022, the event had grown significantly, with over 110 worldwide exchanges participating annually. The initiative aims to raise awareness of the role of women in business and finance while promoting gender equality across global markets. The event encourages exchanges to support investments focusing on gender equality, enhance women's access to financial markets, and increase female representation in corporate boardrooms. The SSE plays a crucial role in these efforts by conducting evidence-based policy analysis, fostering a multi-stakeholder consensus, and offering technical guidelines, advisory services, and training to exchanges. For more details on the SSE's work to promote gender equality, see the Gender Equality workstream page.⁴⁶

Moreover, the Central Bank of the Republic of Azerbaijan has been involved in promoting financial literacy and awareness among women, particularly women entrepreneurs, through educational initiatives. These efforts are important for empowering women to manage their finances effectively, make informed economic decisions, and contribute to the overall economic development of the country. In February 2024, the Central Bank organized a series of financial literacy seminars for women in Ganja. These seminars aimed to provide women with the knowledge and skills necessary to navigate the complexities of personal and business finances. Further efforts continued in July 2024, when the Central Bank launched additional measures aimed at increasing the financial awareness of female entrepreneurs in Azerbaijan.⁴⁷

⁴² <https://banks.am/en/news/newsfeed/28715>

⁴³ <https://www.afi-global.org/news/advancing-financial-inclusion-in-eastern-europe-central-asia-ecapis-expert-group-meets-in-armenia/>

⁴⁴ <https://report.az/en/business/38-azerbaijani-firms-join-un-women-s-empowerment-principles/>

⁴⁵ <https://www.world-exchanges.org/news/articles/world-federation-exchanges-announces-11th-ring-bell-gender-equality-initiative>

⁴⁶ <https://sseinitiative.org/gender-equality>

GEORGIA – Empowering Women in Finance: A Call to Action

On 24 March 2025, the Georgian financial sector, in partnership with UN Women and the IFC, hosted an event as part of the global initiative Ring the Bell for Gender Equality,⁴⁸ reaffirming the sector's commitment to advancing women's economic empowerment. The event took place for the first time in the city of Kutaisi. It spotlighted the impact of private sector companies aligned with the UN Women's Empowerment Principles (WEPs), as well as the critical role of the public sector in fostering inclusive growth. High-level representatives from the Georgian Stock Exchange, the Norwegian Embassy, and UN Women were joined by local financial institutions and women entrepreneurs to discuss barriers and opportunities for women in business. The event featured a panel discussion highlighting how access to finance, supportive business networks, and targeted policies can enable women-led enterprises to grow and thrive. A key focus was also placed on social enterprises supporting survivors of domestic violence, emphasizing the intersection of economic empowerment and social protection.

The launch of a new UN Women publication, *Women's Empowerment: A Key to Business Success*, further showcased examples of private sector engagement in promoting women's access to finance and participation in high-growth industries. The initiative is part of the broader project Good Governance for Gender Equality in Georgia, being funded by Norad. This underscores how strategic public-private collaboration can accelerate gender equality in both traditional finance and emerging sectors such as digital assets and cryptocurrencies.

At the Women in Business economic forum held⁴⁹ on 24 September 2024, the vice governor of the National Bank of Georgia (NBG), Ekaterine Galdava, reaffirmed the NBG's strong commitment to advancing gender equality and empowering women in the financial and economic sectors. Representing one of the region's most progressive public institutions in terms of gender representation, Galdava highlighted that women now comprise the majority of the NBG's board and senior management – a testament to the institution's long-standing emphasis on inclusive leadership.

A key focus of the forum was the role of public policy in shaping a more equitable financial ecosystem. Galdava outlined the NBG's initiatives to improve women's access to finance, including the introduction of a sustainable finance taxonomy that supports gender-inclusive financial products, and the adoption of the WE-Finance Code, a data-driven effort to promote gender-responsive entrepreneurship through the collection of gender-disaggregated data on SME financing. She also noted the impact of the NBG's 2018 policy requiring commercial banks to ensure a minimum of 20% female representation on supervisory boards, which has led to a significant increase in women's participation in financial governance. Looking ahead, the NBG aims to further strengthen its capacity to monitor and report on financing for women-led enterprises, reinforcing its role in facilitating inclusive economic growth. The forum, which brought together nearly three hundred participants, including women entrepreneurs from across Georgia and representatives from international organizations such as the EU, UNDP, USAID, and the EBRD, also featured motivational sessions

and workshops designed to empower and equip women with leadership, communication, and entrepreneurial skills. The event, organized by the Georgian business federation Women for the Future in partnership with Visa and Gazelle Finance, underscores how public sector leadership in collaboration with development partners and the private sector can effectively drive progress toward closing the gender gap in finance. This is highly important, especially in the context of emerging areas like digital assets and cryptocurrency adoption in Georgia.

MOLDOVA – Advancing Gender Inclusion in Moldova's Financial Sector

The Women in Finance project⁵⁰ – launched in 2024 by UN Women Moldova in partnership with Finedu and supported by Sweden and the Moldovan Ministry of Finance – represents a significant step toward advancing gender equality in Moldova's financial sector. Aimed at addressing persistent challenges such as the underrepresentation of women in leadership roles, the gender pay gap, and limited access to financial education and resources, the initiative seeks to empower women across multiple levels of the financial landscape. The project's launch event brought together approximately one hundred professionals from finance, fintech, public institutions, academia, and research organizations.

As part of the initiative, a comprehensive study will be conducted to evaluate the current state of women's representation in Moldova's financial sector and to identify areas for improvement. Regional training clubs will be established to enhance

47 <https://cbar.az/page-819/seminarlarvebinarlar>

48 <https://georgia.unwomen.org/en/stories/news/2025/03/ring-the-bell-for-gender-equality-financial-sector-unites-to-empower-women>

49 <https://nbg.gov.ge/en/media/news/ekaterine-galdava-highlights-women-s-empowerment-at-economic-forum-women-in-business>

50 <https://moldova.unwomen.org/en/stories/press-release/2024/05/launch-of-the-women-in-finance-project-a-major-step-in-promoting-gender-equality-in-moldovas-financial-sector-and-national-financial-education>

financial literacy and provide career development opportunities for women and young people. A key element of the project is the creation of a professional network of women in finance to encourage mentorship, collaboration, and leadership development. Educational materials will be developed to support ongoing financial education efforts, especially among girls. Moreover, the project will promote policy discussions with government and industry leaders to ensure gender considerations are reflected in financial sector policies.

Although Moldova has made progress in increasing women's representation in leadership, structural barriers remain. The Woman in Finance project seeks to accelerate progress by equipping women with the tools, knowledge, and support systems necessary to participate more actively in decision-making and to advance in financial careers.

The relevance of this initiative extends to the fintech and crypto-assets space, where gender disparities mirror those in traditional finance. By focusing on financial literacy, mentorship, and inclusive networks, the Women in Finance project can serve as a model for fostering greater female participation in emerging digital financial markets. It is playing a vital role in promoting gender inclusion in the rapidly evolving crypto economy, creating a foundation where women are empowered to lead, innovate, and thrive.

The Ring the Bell for All Women and Girls event⁵¹ organized in 2025 by the Moldova Stock Exchange in collaboration with UN Women Moldova and the IFC was part of a global initiative dedicated to advancing gender equality in the

financial and economic sectors. The gathering brought together key stakeholders to emphasize the vital role of women in finance and to reaffirm the importance of equal access to education, employment, and leadership. According to data from the National Bank of Moldova,⁵² women in the country hold more bank cards than men – 1.9 million compared to 1.6 million – and make a higher number of cashless payments, with 139.5 million transactions made by women versus 134 million by men. However, the total value of these transactions remains lower for women, at MDL 82.9 billion, compared to MDL 85.8 billion for men.

The event underscored several critical insights. Gender equality was highlighted not only as a matter of social justice, but also as a key driver of economic growth, with studies showing that companies with more women in leadership roles tend to perform better, and that inclusive economies are stronger. However, financial activity data points to a persistent empowerment gap: although women are more engaged in digital payment behaviours, their financial influence remains comparatively limited. Bridging this gap calls for focused investment in women-led businesses and expanded access to digital infrastructure such as broadband data transmission. While estimates suggest it may take over a century to close the global gender gap, targeted initiatives and investments can significantly speed up this process. Throughout the event, global and local leaders – ranging from government officials to financial regulators and international partners – voiced their continued commitment to ensuring that women have equal representation in financial decision-making. The themes explored

during the event were directly relevant to gender inclusion in the crypto space. Structural inequalities in traditional finance are mirrored in digital finance and the crypto industry, where women also remain underrepresented. Promoting inclusion, expanding access to financial education, and supporting women-led enterprises are strategies that can be applied to the crypto sector to encourage broader female participation. The initiative serves as a powerful call to action for both established and emerging financial ecosystems to build a future where women enjoy equal access, representation, and opportunities for empowerment.

In preparation for the 68th session of the Commission on the Status of Women (CSW68), the UN Women Regional Office for Europe and Central Asia convened a regional multi-stakeholder dialogue on 20 February 2024 to advance gender equality and reduce women's poverty in Armenia, Georgia, Moldova, and Ukraine.⁵³ Hosted by the Government of Moldova, the consultation brought together over 120 representatives from public institutions, civil society, academia, and the private sector to align strategies and share best practices.

Key public sector figures – including ministers and deputy ministers from the four participating countries – reaffirmed their commitment to integrating gender considerations into economic and financial policymaking. Armenia highlighted its constitutional and international commitments to closing the gender pay gap, while Moldova underscored its political will to be a regional leader in gender equality, particularly through family-friendly policies and women's economic empowerment. Georgia emphasized

51 <https://moldova.unwomen.org/en/stories/comunicat-de-presa/2025/03/suna-clopotelul-pentru-toate-femeile-si-fetele-promovarea-egalitatii-de-gen-in-sectorul-financiar-si-economic>

52 <https://bnm.md/en/content/nbm-promotes-gender-equality-more-inclusive-financial-sector>

53 <https://moldova.unwomen.org/en/stories/press-release/2024/02/regional-dialogue-aims-to-reduce-womens-poverty-and-advance-gender-equality-in-armenia-georgia-moldova-and-ukraine>

the adoption of gender-responsive budgeting within its public finance system, and Ukraine spotlighted its national strategy to close the gender pay gap by 2030, including targeted employment and education programmes for women.

The discussions revealed that a lack of gender-sensitive poverty measurement and data remain a barrier to designing

effective policy. To address this, stakeholders called for increased investment in the care economy, improved access to social protection, and integration of gender into public financing, investment strategies, and humanitarian programmes. This regional dialogue demonstrates the critical role of the public sector in enabling structural reforms that support women's financial inclusion.

Such efforts are highly relevant in the context of digital financial innovation, including the use of cryptocurrencies, where gender-sensitive policy frameworks and inclusive institutional leadership are essential for closing the digital gender divide. The outcomes of this consultation will inform the region's contribution to CSW68 and shape future national strategies for gender equality.

The Role of the Private Sector in OSCE Participating States

The private sector plays a crucial role in addressing the gender gap in cryptocurrency ownership and usage. Through innovation, investment, and corporate responsibility, private companies can help create a more inclusive digital financial ecosystem. In the surveyed OSCE participating States, the private sector's involvement in developing accessible platforms, supporting financial literacy programmes, and fostering diversity in leadership positions can significantly reduce barriers for women in the crypto space. This section examines how private sector initiatives and partnerships can help bridge the gender divide and promote equal opportunities for women in the rapidly evolving cryptocurrency market.

ARMENIA

The Web3 Armenia Foundation⁵⁴ highlights the growing role of women in shaping the future of decentralized technologies and digital economies. Despite facing initial skepticism and gender-based challenges in the traditionally male-dominated Web 3.0 sector, Armenian women have persevered and made substantial contributions to the industry. Female leaders such as Anait Ambartsumyan,

Metakse Ghambaryan, Arpine Hakobyan, Maria Voskanyan, and Yeva Zeynalyan have shared their experiences, overcoming obstacles through persistence, self-education, and a commitment to fostering inclusivity in the Web 3.0 ecosystem. These women have highlighted the importance of diverse roles within Web 3.0, from marketing and design to technical coding and programming. They believe that the increased involvement of women in these spaces not only brings unique perspectives, but also fosters a more inclusive and resilient digital economy. They are committed to driving positive change, with many women working to ensure that Web 3.0 platforms remain decentralized, inclusive, and supportive of women's leadership. To promote greater inclusivity, the Foundation's community advocates for mentorship programmes, diverse hiring practices, and safe spaces that empower women to thrive. They also emphasize the need for initiatives that support girls in pursuing careers in Web 3.0. This collective approach aims to create an ecosystem where women can contribute to the development of ethical and innovative solutions in the blockchain and cryptocurrency space. As the Web 3.0 landscape continues to evolve, the leadership of women

in Armenia is essential for ensuring a balanced and equitable future in decentralized technologies. Their active participation and leadership are crucial in shaping a thriving, diverse digital economy.

Armenia's rapidly growing IT sector, with annual growth rates of 20%, has become a major hub for global tech companies and is on track to host ten unicorns by 2027. Women are playing a pivotal role in this growth, with 30%–40% of employees in Armenia's IT sector being women, surpassing the global average of 25%. Despite these impressive statistics, the true representation of women in technical roles is often inflated due to their significant presence in divisions such as human resources (HR), marketing, and administration. FemInno, an empowerment platform founded by Seda Papoyan, seeks to highlight and promote women in Armenia's tech industry.⁵⁵ The platform aims to create opportunities for women in business, science, and technology by fostering collaboration and innovation. The FemInno conference, which took place 29 and 30 July 2024, brought together international experts and local professionals to explore the topic Sustainable Future: Heading to Metaverse.⁵⁶ The conference featured

⁵⁴ <https://www.linkedin.com/pulse/armenian-women-web3-web3-armenia-foundation-2r8ae/>

⁵⁵ <https://www.feminno.com/our-story>

⁵⁶ <https://www.civilnet.am/en/news/745256/feminno-shines-spotlight-on-women-in-tech-in-armenia/>

more than forty speakers from across the globe and provided a space for networking and knowledge-sharing. Key figures like Mariam Torosyan, CEO of SafeYOU, and Vera Grablechner, Co-Founder of Women in Immersive Technologies Europe, emphasized the importance of women's leadership in tech. Torosyan, who leads a mobile app providing support for victims of violence, aims to change perceptions regarding social impact startups and inspire more women to pursue careers in technology. Grablechner highlights the unique role Armenian women can play in bridging communities and driving sustainability in the tech world. FemInno's efforts to empower women in Armenia's tech sector are essential to closing the gender gap in the industry, fostering innovation, and ensuring the active participation of women in shaping the future of technology, including the emerging metaverse. Through mentorship, collaboration, and showcasing female role models, FemInno is working to build a more inclusive, diverse, and thriving tech community in Armenia.

AZERBAIJAN

The Tamas-Servi Limited Liability Company, under the initiative Increasing the Tailoring and Social Entrepreneurship Skills of Women in the Region Exposed to Violence,⁵⁷ organizes personal development and financial literacy training for women in vulnerable situations. The initiative, supported by the Central Bank of the Republic of Azerbaijan, aims to empower women by providing them with essential financial knowledge to enhance their economic independence and resilience.

A key activity was a financial literacy training session held at the office of the Tamas Regional Development Public Institution, where Lamiya Gafarova,

a representative from the Central Bank's Financial Literacy Department, presented a session on consumer budgets. This session was part of a broader effort to increase financial literacy among women, including offering them access to essential resources such as electronic tools prepared by the Central Bank to further their learning.

Sudaba Mammadova, Chairperson of Tamas Regional Development Public Union, emphasized the importance of the training, highlighting that the knowledge gained would help women plan their budgets, manage financial risks, and make informed financial decisions, ultimately leading to better productivity and reduced financial stress. The initiative is part of the project Development of an Innovation-Based and Sustainable Civil Society in Azerbaijan, which is funded by the EU and implemented by the United Nations Development Programme. The project is contributing to the broader goal of enhancing women's financial empowerment in vulnerable communities.

The SHE Pioneers Leadership Programme,⁵⁸ supported by the Swedish Institute, aims to empower women executives globally by enhancing their leadership capabilities. In Azerbaijan, the programme is being implemented in Baku by the Embassy of Sweden and the organization Gender Hub Azerbaijan. A series of on-demand sessions, workshops, and networking opportunities organized by the programme and running from March to April 2024 provided women leaders with the opportunity to reflect on and improve their leadership skills. The programme focused on equipping women with the tools to lead in complex, fast-paced, and evolving environments, addressing the challenges faced by women in leadership. This year, 23 women from

diverse professional backgrounds, including managers, engineers, lawyers, and entrepreneurs, successfully participated in the programme. As one participant, Samira Mammadova, noted, the programme reinforced the belief that women have the power to overcome challenges and become strong leaders, further contributing to gender equality in leadership roles.

GEORGIA

The Fintech Association of Georgia (FIA), established in 2019, has played a pivotal role in the rapid development of the fintech sector in Georgia. As the sector has evolved both locally and globally, the need for a unified platform to foster collaboration between market players and regulators became essential. FIA was founded by industry leaders to address this gap, promoting technology-driven financial services, innovation, and regulatory modernization. Since its inception, FIA has served as a vital platform for knowledge sharing, fostering connections between both public and private sector entities. Its members, which include innovators and new market players, compete with traditional financial institutions in creating flexible, affordable, and inclusive products. Through its leadership, FIA has successfully implemented various impactful projects, participated in numerous international and local fintech conferences, and formed key partnerships with organizations both within and beyond Georgia. Today, FIA unites 31 fintech members and 26 partner companies, solidifying its position as a cornerstone in the Georgian fintech ecosystem and as a strong advocate for inclusiveness and innovation in the financial technology space.

Tether Edu Initiatives is a global education initiative launched by Tether

⁵⁷ <https://azadmedia.az/cemiyet/92812-gncd-qadnlar-ucun-maliyy-savadll-tlimi-tkil-olunub-fotolar.html>

⁵⁸ <https://www.genderhubaz.org/our-projects/she-pioneers>

to promote digital skills development. While it doesn't target women exclusively, the programme aims to make digital education accessible to all, potentially benefiting women seeking to enter the blockchain and crypto industries.⁵⁹

On 23 December 2023, Tether announced an undisclosed investment into the Series-A round of the Academy of Digital Industries, a Georgia-based education platform offering digital training and masterclasses.⁶⁰ This collaboration supports Tether's ongoing efforts to promote blockchain innovation and provide long-term financial assistance to the Academy's educational initiatives. Founded in 2018, the Academy offers a diverse range of courses in fields such as design, engineering, marketing, business, and technology. With nearly 20,000 graduates, the Academy has grown steadily by incorporating innovative learning methods. Various partnerships are expanding the Academy's global strategy by incorporating blockchain, stablecoins, peer-to-peer technologies, and AI into its curriculum. Tether's CEO, Paolo Ardoio, has emphasized the importance of accessible, unbiased education for the future of humanity and expressed excitement about collaborating with the Academy to

bridge knowledge gaps globally. As part of this collaboration, Tether launched its first educational programme in Georgia, Mastering the Blockchain, in partnership with the Academy, the Georgian Agency for Innovation and Technology (GITA), and Georgia's Business and Technology University. The course covers blockchain fundamentals and their impact on decentralized finance, and features expert guest lecturers.⁶¹ The partnership underscores Georgia's commitment to advancing financial freedom and innovation through education.

MOLDOVA

Fintech Moldova⁶² is a leading initiative dedicated to advancing Moldova's financial technology ecosystem, playing a pivotal role in shaping the future of digital finance and fostering gender inclusion in cryptocurrency adoption. Through its focus on innovation, collaboration, and knowledge-sharing, it contributes to bridging the gender gap in the digital finance sector. One of the key contributions of the private sector is driving innovation and financial inclusion. Events like the Fintech Moldova Conference bring together key players in finance, technology,

and policy, fostering discussions and initiatives aimed at advancing fintech and bridging the gender gap in digital asset adoption. The conference serves as a platform for raising awareness about digital banking, open finance, and decentralized technologies, ensuring that women and underrepresented groups gain access to knowledge and opportunities in cryptocurrency and blockchain. By facilitating collaboration and networking among over four hundred professionals from diverse sectors, the private sector is helping to build partnerships that can create initiatives focused on increasing women's participation in digital finance.

Furthermore, the involvement of decision-makers and industry leaders in these events allows for meaningful discussions on creating inclusive regulatory frameworks, ensuring that women's access to crypto assets is not hindered by systemic barriers. As the fintech sector continues to evolve, initiatives like Fintech Moldova play an essential role in integrating women into the digital finance revolution. By prioritizing education, accessibility, and collaboration, these efforts can help reduce the gender gap in cryptocurrency ownership and usage, empowering women to be both users and innovators in the crypto space.

Global Insights and Lessons from Collaborative Efforts

Understanding the gender gap in the ownership and use of cryptocurrencies requires not only local analysis, but also a global perspective. Around the world, cross-sector collaborations – between governments, international organizations, financial institutions, civil society, and the private sector – have

played a pivotal role in revealing both the challenges and the breakthroughs in advancing gender-inclusive digital finance. The following section draws on international experiences to highlight the most impactful strategies and emerging best practices. The insights presented here can serve as a foundation for

contextualizing the current landscape and identifying scalable, effective approaches to ensure that women are not left behind in the digital financial revolution.

Financial education in the 21st century must evolve to include digital assets,

⁵⁹ In partnership with the City of Lugano and Franklin University Switzerland, Tether co-organized the Plan B Summer School, an intensive programme covering topics like Bitcoin, the Lightning Network, stablecoins, and regulatory compliance. Notably, a third of the participants were women, reflecting a commitment to fostering gender diversity in the blockchain space.

<https://tether.io/news/students-from-29-nations-participate-in-tether-and-the-city-of-luganos-inaugural-plan-b-summer-school>

⁶⁰ <https://tether.to/en/tether-makes-investment-into-the-academy-of-digital-industries/>

⁶¹ <https://digitaledu.ge/blog/mastering-the-blockchain-blokcheinis-ertviani-kursi/>

⁶² <https://fintech.md>

given their growing significance in the global economy.⁶³ Communities of color,^{64 65} the working class,⁶⁶ and younger generations are leading in cryptocurrency adoption, making it essential to update financial literacy initiatives. During National Financial Literacy Month, US regulatory agencies, including the Financial Literacy and Education Commission (FLEC), focused on digital asset education. FLEC's subgroup, formed in 2022, is working to prepare the public for the future of finance. Additionally, US Congress members promoted financial literacy, with a focus on decentralized finance (DeFi). Web 3.0 and DeFi companies are also supporting these efforts, organizing educational programmes such as the HederaHBAR regional briefing series to integrate digital assets into financial education. These initiatives aim to ensure that digital assets are integrated into the financial literacy conversation to foster responsible innovation and prepare individuals for the future of money and commerce.

1. The Association for Women in Cryptocurrency (AWIC),⁶⁷ founded by Amanda Wick, aims to address the gender gap in the cryptocurrency, blockchain, and Web 3.0 sectors. AWIC was established with the goal of providing women with the support, resources, and opportunities needed to succeed in these predominantly male-dominated industries. With Wick's extensive background in legal affairs and policy advising, the association is uniquely positioned to advocate for women's inclusion and leadership in the rapidly evolving world of digital finance. AWIC offers a collaborative platform that connects members from various sectors, including private, public, educational, regulatory, and financial institutions, to ensure equal

opportunities for women. Through exclusive events, webinars, mentorship, and networking opportunities, AWIC supports the professional growth of women and promotes their participation in investment and funding opportunities. The organization also emphasizes the importance of education, offering resources to increase knowledge in cryptocurrency, blockchain, Web 3.0, and related technologies. AWIC's efforts go beyond education by aiming to foster a strong network of women and allies who can share knowledge, collaborate on initiatives, and advocate for diversity in the digital finance ecosystem. By creating spaces for women to access the latest industry developments, AWIC contributes to informed decision-making and the promotion of inclusive investment strategies. Through planned global events and partnerships, the association continues to build a strong foundation for women's active participation and leadership in cryptocurrency and digital asset industries. In summary, AWIC is playing a critical role in advancing gender equality by empowering women, increasing their access to investment and career opportunities, and providing platforms for networking and knowledge sharing. The association's ongoing commitment to education, mentorship, and advocacy is setting the stage for lasting change in the digital finance sector, ensuring that women are equitably represented and equipped to thrive in the future of blockchain and cryptocurrency.

2. The Binance Women in Technology Academy,⁶⁸ launched in collaboration with Türkiye's Women in Technology Association (Wtech) in January 2024, represents a promising global initiative aimed at closing

the gender gap in financial literacy and technology participation. This programme is designed to equip young women with the skills and confidence to become leaders in Web 3.0, blockchain, and cryptocurrency – fields where women remain significantly underrepresented. The academy offers a comprehensive curriculum that spans a broad range of emerging digital and financial technologies, including blockchain, NFTs, digital wallets, artificial intelligence, Internet of Things (IoT), cybersecurity, and digital productization. By linking technical skills with financial literacy, the initiative addresses both technological and economic barriers to women's inclusion in the crypto space. Through live training sessions, industry insights, and inspirational success stories, the academy not only educates but also empowers its participants to challenge traditional gender roles and explore new opportunities in digital finance and innovation. The programme has already doubled its intake capacity due to high demand; it aims to reach 5,000 women across Türkiye over the next five years. The collaboration serves as a model for global efforts to reduce the gender gap in the ownership and use of cryptocurrencies. It highlights the importance of targeted, scalable educational programmes and public-private partnerships that prioritize gender equity in the rapidly evolving digital financial ecosystem.

The Binance Women in Technology Academy held a successful event in Hatay's Antakya district on 26 and 27 March 2024 that was focused on empowering women in the Web 3.0 landscape.⁶⁹ At the conclusion of the event, eighty participants received certificates, marking a significant step toward increasing women's

63 <https://www.forbes.com/sites/digital-assets/2024/03/31/financial-education-is-incomplete-if-digital-assets-are-omitted/>

64 <https://theemancipator.org/2022/05/12/topics/money/crypto-can-be-driver-racial-equity/>

64 <https://www.nasdaq.com/articles/how-crypto-can-power-the-future-of-work-for-people-of-color>

66 <https://rollcall.com/2021/09/07/left-behind-by-financial-system-minorities-turn-to-new-products/>

67 <https://www.womenincrypto.org>

68 <https://www.binance.com/en/blog/ecosystem/binance-women-in-technology-academy-training-sessions-kick-off-to-empower-financial-literacy-in-turkey-8849644074542216976>

participation in the tech sector and bridging the gender gap in emerging technologies.

3. Women's World Banking,⁷⁰

a global non-profit organization based in New York City, has been dedicated to advancing women's financial inclusion and economic empowerment for over forty years. Governed by a Board of Directors composed of leaders from banking, finance, law, and women's economic participation, the organization focuses on bridging the financial gender gap, particularly as nearly 1 billion women worldwide remain underserved by the financial sector. The organization works across several core areas, including gender lens investing, inclusive policy advocacy, leadership development, and providing solutions for women-owned businesses. Through strategic partnerships with financial institutions, regulators, and research partners, Women's World Banking has made significant strides in enhancing financial service access for women, reaching over 10.6 million women through savings or credit-led

solutions in the past five years alone. A key aspect of their mission is to promote gender-diverse leadership within the financial sector. Through initiatives such as the Gender Lens Investing programme and leadership training programmes, Women's World Banking aims to equip women with the tools and knowledge necessary to thrive in financial leadership roles. The organization also supports the creation of women-centered financial products and works with financial institutions and fintechs to ensure their offerings are inclusive and gender intentional. Additionally, Women's World Banking provides a unique multi-week programme designed to train diverse policymakers, regulators, and supervisors on the intersection of technology and financial inclusion. By educating global leaders on how to integrate gender-focused innovation into financial technologies and regulatory frameworks, the programme contributes to shaping the future of financial services that are inclusive of women's needs. The organization's extensive global network, comprising leaders from over ninety countries,

ensures that this knowledge-sharing approach will continue to drive positive change. In partnership with institutions like the Visa Foundation and the Alliance for Innovative Regulation (AIR), Women's World Banking also advocates for responsible technology use in the financial sector and continues to engage men as allies to increase gender-diverse leadership. Through ongoing events, podcasts, and research initiatives, the organization fosters a collaborative environment that helps women access financial tools, leadership opportunities, and investment strategies, ultimately striving for a more inclusive global financial system. In summary, Women's World Banking's comprehensive approach – spanning advocacy, education, investment, and partnerships – plays a crucial role in empowering women globally and addressing the gender gap in financial services. Through these efforts, the organization is not only advancing women's financial inclusion, but also shaping a more equitable and resilient financial ecosystem for the future.

Survey Results from the Region

To better understand the gender dynamics within the virtual assets space, primary data was gathered through targeted surveys. The surveys aimed to assess how and when VASPs and organizations focused on women's financial empowerment have engaged with issues related to women's participation and financial literacy in the cryptocurrency sector. The findings offer insight into regional awareness, existing initiatives, and potential areas for intervention in Armenia, Azerbaijan, Georgia, and Moldova.

A regional survey was conducted to evaluate women's participation and

financial literacy in the virtual assets sector in the above four countries. Distributed in both English and Russian, the survey targeted VASPs, as well as institutions supporting women's financial well-being. The primary objectives were to gauge how proactive these stakeholders are in promoting gender inclusion and to identify gaps in support for women entering the crypto economy.

While outreach to VASPs yielded a very low response rate – only three responded, which limited the ability to draw conclusions from the surveyed group – responses from nine women's

organizations were collected via an online questionnaire. One organization operated across both Armenia and Georgia, and its responses were considered representative for both countries individually.

Despite efforts to engage VASPs, the response rate was notably low, with only three out of the surveyed entities providing feedback. Due to the limited sample size, these responses could not be used for meaningful analysis. However, among the organizations and institutions contacted, a total of nine responses were collected via an online questionnaire over a two-week

⁶⁹ <https://financefeeds.com/empowering-women-in-tech-the-binance-women-in-technology-academy-initiative/>

⁷⁰ <https://www.womensworldbanking.org>

period. One of the respondents operates in both Armenia and Georgia, and thus for the purpose of this research, their responses have been treated as representing both countries separately. Despite

the small sample size, the findings underscore the critical need for greater engagement and structured efforts by both the private sector and civil society to support women's financial literacy and inclusion in the

growing virtual assets landscape. The results reinforce the importance of building gender-responsive strategies as crypto adoption expands in the region.

Insights from Key Market Players

In recent years, the virtual asset ecosystem has grown rapidly across the South Caucasus and Moldova, offering significant economic opportunities and potential for financial inclusion. However, despite this promise, gender disparities persist in access to, usage of, and employment within the virtual assets sector. Women

remain underrepresented among users, employees, and entrepreneurs in the blockchain and cryptocurrency space, which risks reinforcing broader gender gaps in digital and financial inclusion.

To better understand the current state of gender dynamics within the virtual

asset sector in Armenia, Azerbaijan, Georgia, and Moldova, a short survey was conducted targeting registered VASPs operating in these countries. The aim was to collect baseline data on gender representation among users and employees, identify existing inclusion practices, and gather insights into areas of potential improvement.

Methodology

Between February and March 2025, a total of 82 surveys to individuals representing 23 VASPs were distributed electronically to VASPs across Armenia, Azerbaijan, Georgia, and Moldova. The survey included both quantitative and qualitative questions, covering the following thematic areas:

- Company background and services offered;
- User demographics and gender-disaggregated data;

- Employment and inclusion of women at VASPs;
- Gender-focused initiatives, education efforts, and inclusivity measures;
- Perceptions and trends related to gender and crypto adoption.

Despite extensive outreach efforts, the response rate was low: only three individuals representing three VASPs completed the full survey, all based in Georgia and all offering their services to Georgian citizens. While this limited response restricted the ability to

generalize the findings, the insights offered by the participating companies still provide a valuable starting point for understanding the gender gap in this emerging industry.

One representative from a VASP has confirmed that their services are accessible equally to all users, regardless of gender, explicitly stating that both genders are given the same rights to use the services, with no restrictions or differentiated treatment in this regard.

Conclusion

It was determined that the data received from the three VASPs was insufficient in scope and volume to allow for meaningful analysis or inclusion in this report. Due to the limited sample size, the information cannot be considered representative or statistically significant for broader conclusions.

While all three companies show varying stages of inclusivity, there

is significant room for growth. Coinet demonstrates early traction with female users; Cryptal reflects a balanced workforce; Bitanica LLC holds future potential as it scales. Proactive steps – especially regarding education, data collection, and Diversity, equity, and inclusion (DEI) partnerships – may help close the gender gap and build a more equitable virtual asset ecosystem in the South Caucasus and beyond.

To encourage more VASPs to actively engage in addressing and closing the gender gap in the virtual asset space, a multi-pronged, strategic approach can be adopted. A proposal for action points includes the following points:

1. Awareness & education

- Host industry webinars or roundtables focusing on gender diversity, inclusive hiring, and user engagement;

- Share data-driven insights (like ownership and access gaps) that show how addressing the gender gap benefits both business and society;
- Publish case studies of successful women-led initiatives or gender-inclusive platforms in the blockchain/crypto space.

2. Collaborative industry initiatives

- Establish a coalition or working group of VASPs focused on gender inclusion, ideally in partnership with international organizations (e.g., UN Women, OSCE, WEF);
- Encourage industry-wide pledges or charters that commit to inclusion, similar to what financial institutions have adopted globally.

3. Incentivization

- Offer recognition programmes or awards for VASPs that are leading in gender initiatives;
- Highlight companies in media, reports, or rankings that implement inclusive practices (e.g., women in leadership, gender data transparency).

4. Regulatory encouragement

- Work with regulators and standard-setters to encourage reporting on gender-disaggregated data as part of broader Environmental, social and governance (ESG) or AML/CFT frameworks;
- Encourage voluntary compliance with inclusion-related indicators or frameworks.

5. Grassroots engagement

- Support or co-develop women-focused financial literacy and crypto education programmes in partnership with VASPs;
- Involve women users and employees in co-creating inclusive platforms, helping to ensure VASPs understand real-world barriers.

6. Transparency & accountability

- Promote voluntary disclosure of gender-related metrics (e.g., percentage of female users, leadership representation);
- Use benchmarks or scorecards to track industry progress.

Insights from Organizations

To better understand the gender gap in cryptocurrency ownership and usage, various organizations across the region have contributed valuable insights.

Data overview

1. The respondents represented a group of organizations from the following countries:

- **Armenia:** 3 (30%)
- **Azerbaijan:** 1 (10%)
- **Georgia:** 4 (40%)
- **Moldova:** 2 (20%)

2. The following organizations/institutions participated in the survey:

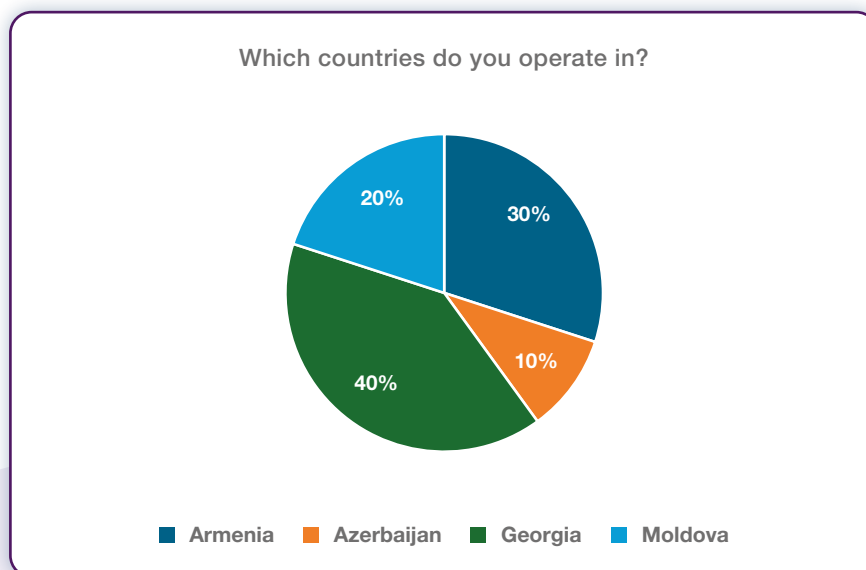
A. GTC, 2014 Gyumri, Armenia

B. ATIC, Moldova

C. UN Association of Georgia (est. 1995), Georgia

D. Fintech Moldova, Chişinău, 2021

Table 12



E. Gender Hub Azerbaijan, 2020, Azerbaijan, Baku, J.Jabbarly st. 66 Enterprise Incubator Foundation, 11 Jan. 2002, Bagrevand 21/1, Yerevan, Armenia

F. Skills Agency, established in April 2021, started operation in January 2022

G. Azerbaijan Micro-finance Association, 29 November 2004, Azerbaijan

H. Web3 Armenia Foundation, 2023, Yerevan, Armenia

The respondents represented a group of organizations with the following number of employees and volunteers:

Range (number of female employees)	Percentage (%)
0–5	11%
6–15	33%
16–50	22%
51–100	0%
100+	10%

Descriptive analysis

1. When asked whether they had organized in-person or online events

– such as meetups, workshops, conferences, or educational programmes – specifically focused on women within the past five years,

89% of respondents confirmed hosting such initiatives, while 11% reported no involvement in these activities.

Table 13

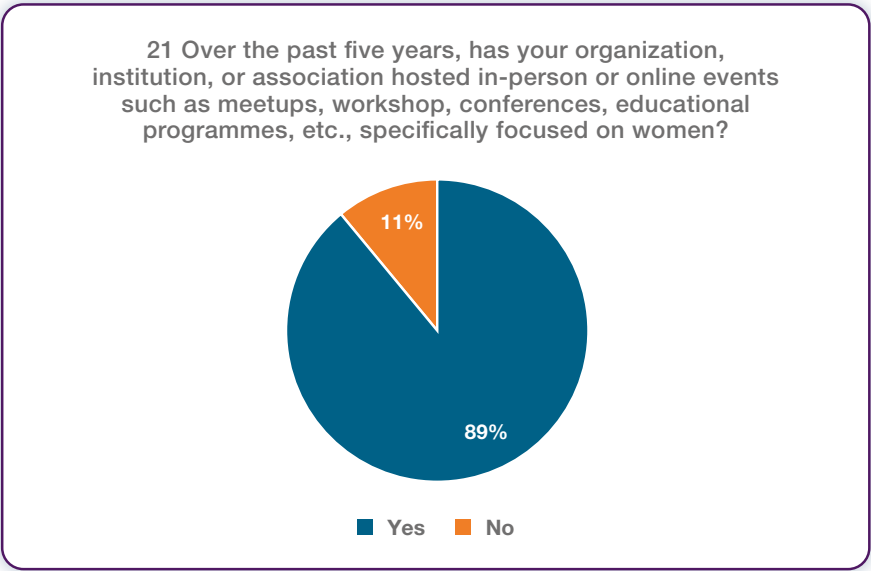
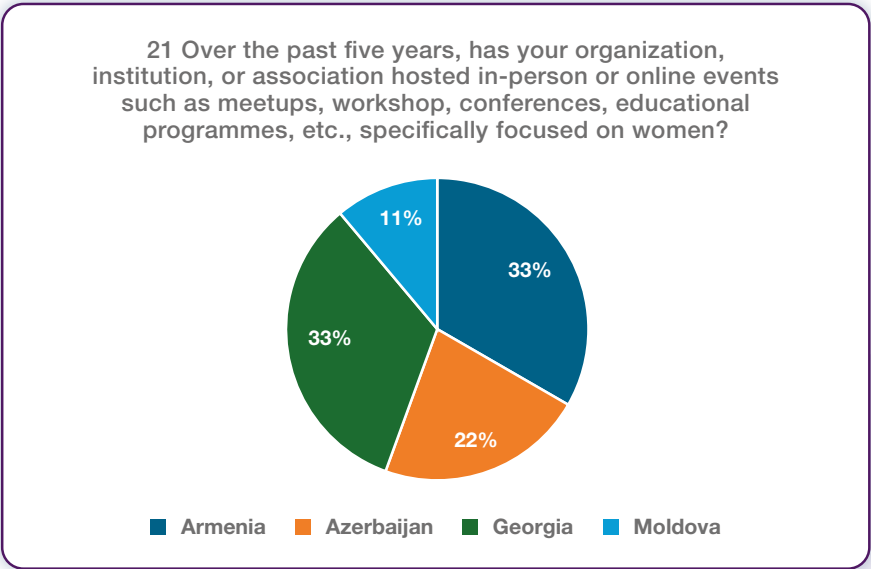


Table 14

Distribution of responses based on country



Organizational Initiatives Focused on Women (last five years)

The majority of respondents (89%) reported having organized in-person or online events specifically focused on women over the past five years. These events spanned a wide variety

of formats, including meetups, conferences, workshops, mentorship programmes, and educational sessions. The scope and thematic focus of these initiatives reflect

a strong regional commitment to gender empowerment, financial inclusion, and digital literacy. Below is a synthesis of the types of activities and impacts that were reported:

Focus area	Description	Country/organization examples
Educational and empowerment programmes	Programmes targeting girls and young women; practical business and financial skills; mentorship	Gamechangers for Girls, Investment Readiness for Women-led Enterprises (Armenia)
National and international conferences	HR, AI, and digital expos, with ensured female representation among speakers and attendees	Tekwill Expo Days, HR and AI conferences
Gender advocacy and feminist organizing	Grassroots activism; gender equality advocacy; rural outreach	Gender Hub Azerbaijan
Entrepreneurship and investment readiness	Investment readiness programmes leading to real business growth; mentorship; funding	99 women-led firms supported, of which 18 have raised over USD 1M (Armenia)
Vocational education reform	Gender-sensitive education in vocational institutions; mechanisms to prevent sexual harassment	Prestige and Iberia Colleges (Georgia)
Financial and strategic skills training	Training in business plans, marketing, Islamic finance, and policy influence	FINCA, Rabita Bank (Azerbaijan)
Web 3.0 and innovation events	Web 3.0 education, tech regulation, female innovation leadership	Feminno conference and local Web 3.0 seminars

These activities demonstrate both the diversity and depth of regional engagement in advancing women's

roles in finance, technology, and education. They also illustrate a promising framework for future

initiatives focused on closing gender gaps in the virtual asset and financial sectors.

Involvement in international educational collaborations

According to the collected data, 89% of respondents are currently or have been involved in international collaborations with private or public sector entities for joint educational programmes, courses, and workshops. The remaining 11% who have not participated expressed interest in such initiatives. Country-specific data shows that involvement is highest in Armenia and Georgia (33% each), followed by Moldova (22%) and Azerbaijan (12%), indicating varying levels of international engagement across the region.

Table 15

Is your organization/institution/association currently or was it in the past involved in any international collaboration with entities in the private or public sector for the purpose of joint educational programmes, courses, workshops, etc.?

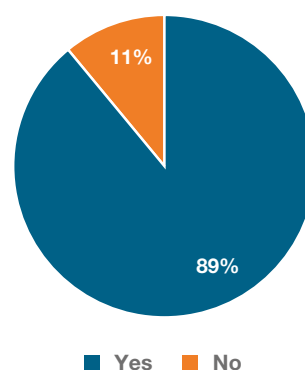


Table 16

Distribution of responses
based on country



Additional Insights on International Educational Collaborations

In addition to the previously discussed quantitative data, several respondents provided detailed information regarding their ongoing or past international collaborations. These qualitative insights further illustrate the nature and depth of partnerships across the region:

- **Fintech Moldova** reported an extensive network across Europe of partnerships with fintech associations, ecosystem builders, and finance and tech sector companies, through which they collaborate on joint events and delegations.
- One Azerbaijani respondent highlighted collaborations under the EU 4 Gender Equality and EU 4 Youth projects, as well as initiatives with UN agencies (OHCHR, UNFPA), focused on gender equality and human rights.
- In Armenia, the **Enterprise Incubator Foundation** shared its leadership in the USAID-funded Armenia Workforce Development Activity, which aims to equip 10,000 youth and women with market-relevant skills and ensure

7,000 improved employment outcomes in sectors such as ICT, agriculture, and hospitality.

- **Skills Agency:** in Georgia, detailed involvement in two Erasmus+ Capacity Building in Vocational Education and Training (VET) projects:
- **Beyond Europe with Micro-credentials (BEM):** Focused on developing sector-relevant micro-credentials for underrepresented populations across eight partner countries.
- **IN-VET:** Aiming to support disadvantaged students from Armenia, Georgia, and Moldova with international internships, while building institutional capacity and fostering gender-balanced participation.
- One respondent noted a recent partnership with the **National Polytechnic University** and the **Ministry of High-Tech Industry** for delivering educational content on Web 3.0 and blockchain technologies.

- Another organization expressed interest in developing international programmes, citing the need for external funding to support expert honorariums and related expenses.

These responses reinforce the active role regional institutions are playing in transnational collaboration, while also highlighting the need for sustained support and investment to expand participation and impact.

Organizational engagement in addressing gender gaps in finance and Web 3.0

When asked about their organization's involvement in raising awareness of gender disparities, entry barriers, financial behaviours, and potential solutions within the financial and virtual asset ecosystem (Web 3.0), 67% of respondents indicated engagement in such initiatives, while 33% reported no involvement. The distribution of engaged organizations was evenly spread across Armenia, Azerbaijan, Georgia, and Moldova, with each country representing 25% of the total responses.

These findings suggest a strong regional commitment to addressing gender disparities in finance and Web 3.0. However, the 33%

non-involvement rate highlights an opportunity for further outreach and collaboration. Strengthening awareness campaigns, fostering

cross-border partnerships, and providing targeted resources could enhance participation and impact across the four countries.

Table 17

Is your organization/institution/association familiar with or in some way involved in bringing awareness of gender disparities, entry barriers, financial behaviour, or potential solutions to address gender gaps within the financial and/or virtual asset ecosystem Web 3.0?

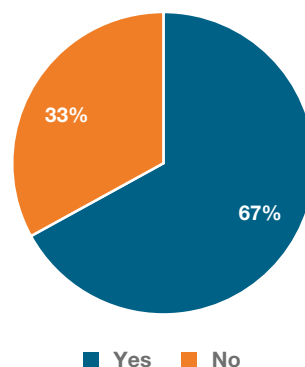
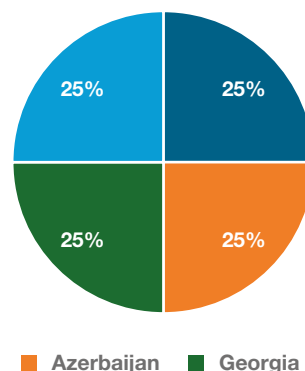


Table 18

Distribution of responses based on country

Is your organization/institution/association familiar with or in some way involved in bringing awareness of gender disparities, entry barriers, financial behaviour, or potential solutions to address gender gaps within the financial and/or virtual asset ecosystem Web 3.0?



Expanded Insights on Organizational Engagement in Addressing Gender Gaps

Supplementing an earlier analysis, several respondents elaborated on their initiatives to address gender disparities, particularly within finance, and broader digital inclusion.

- Multiple respondents emphasized that their financial literacy and digital skills development programmes were intentionally designed to bridge

gender gaps, thereby tackling both economic and digital divides.

- In Azerbaijan, the initiatives Women Bazaar and Women in Business have supported over two hundred women – many from rural or disadvantaged backgrounds – in launching and expanding micro-enterprises. The programmes offer practical training

in business planning, financial management, branding, and communication, while also providing access to mentorship from prominent female leaders across the public and private sectors.

- Although not directly focused on Web 3.0 or virtual asset ecosystems, the World Bank has implemented

the tech-driven social impact project Geeks Against Gender-Based Violence, which uses innovative digital approaches to address challenges related to gender-based violence.

- In Georgia, the Skills Agency is actively implementing an inclusive development policy aimed at eliminating barriers for women in vocational education. This includes staff training on gender-sensitive approaches, the introduction of inclusive support services, and the promotion of non-stereotypical career pathways for women.
- An Armenian institution highlighted its long-standing commitment to women's financial inclusion through regional projects, pointing to

additional resources available on their official website.

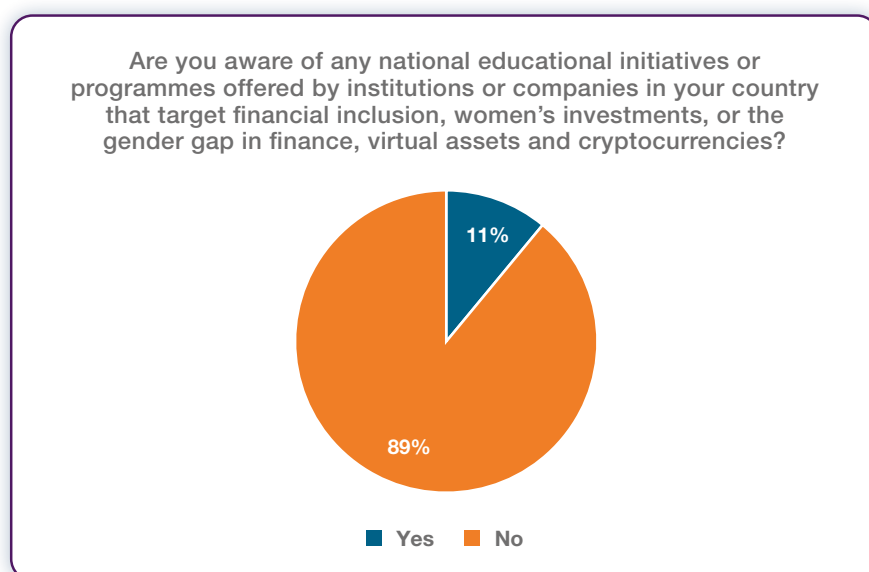
- One respondent mentioned that while they are not specifically focused on gender disparity efforts, they maintain female representation in leadership and within their Web 3.0 community.

These responses underscore the region's growing commitment to inclusive development, also beyond the virtual asset space. While involvement in gender initiatives specific to Web 3.0 remains limited, current efforts in digital inclusion, vocational education, and women's economic empowerment are providing a strong foundation for future cross-sectoral engagement.

Awareness of national educational initiatives on financial inclusion and gender gaps

Regarding national educational initiatives or programmes related to financial inclusion, female investments, the gender gap in finance, or the gender gap in virtual assets and cryptocurrencies, only 11% of respondents reported any awareness of such initiatives in their country, while 89% indicated no knowledge of existing programmes led by institutions or companies. This highlights a significant gap in visibility and outreach of these initiatives at the national level.

Table 19



Expanded Insights on Organizational Engagement on Addressing Gender Gaps

Building on the above findings, which revealed a lack of awareness of national initiatives (with only 11% of respondents stating that they are familiar with such initiatives), additional confirmation of this was provided by the open responses.

- The overwhelming majority of respondents reported no awareness

of any national-level educational initiatives or programmes specifically addressing financial inclusion, female investments, or gender disparities in finance and virtual assets.

- A few respondents mentioned the existence of short-term training programmes, but these were not

described as co-ordinated or institutionalized programmes led by public or private sector actors.

- One organization emphasized the complete absence of such programmes in their country, reinforcing the notion that national initiatives in this area are either nonexistent or lack visibility.

These qualitative insights affirm the earlier statistical finding that national efforts are either underdeveloped or not sufficiently communicated to relevant stakeholders. This highlights a critical gap – but also opportunity – for governments, financial institutions, and educational entities to design and promote sustainable, gender-sensitive financial literacy initiatives at the national level.

Awareness of international educational initiatives on financial inclusion and gender gaps

The survey results indicate that 33% of respondents are aware of international educational initiatives or programmes focused on financial inclusion, female investments, the gender gap in finance, and virtual assets/cryptocurrencies.

The remaining 67% are not. This highlights a potential gap in awareness and outreach, suggesting the need for greater visibility and dissemination of such initiatives.

Table 20

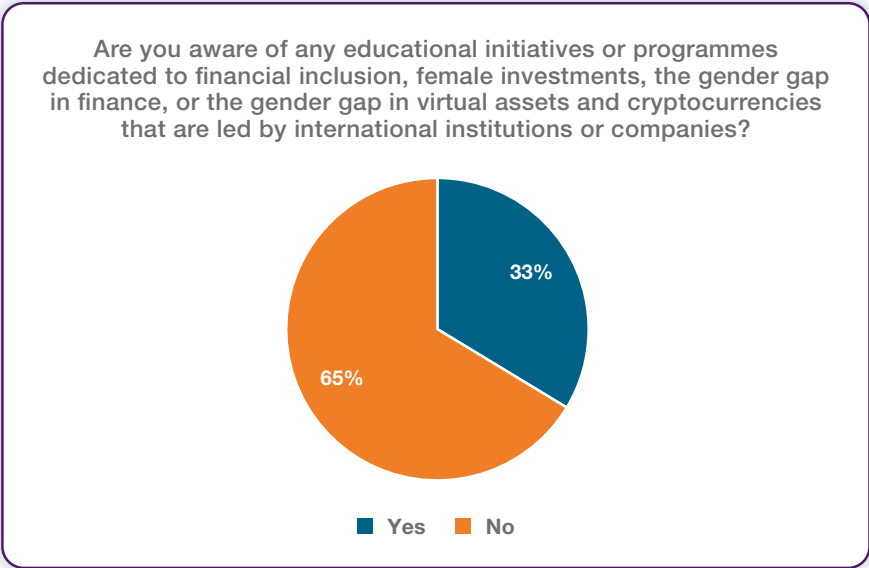
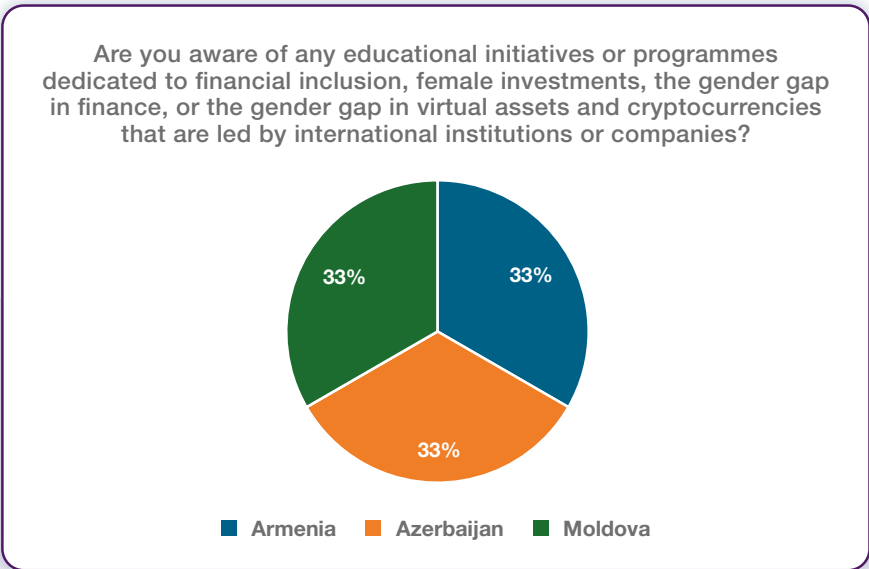


Table 21

Georgia: no responses to this question were received from Georgian-based organizations.



Expanded Insights on Awareness of International Educational Initiatives

Of the surveyed organizations, 33% indicated awareness of international educational initiatives related to financial inclusion, female investments, and the gender gap in finance and virtual assets. The open-ended responses add further context and examples that support this figure:

- Several respondents confirmed awareness of prominent international programmes and institutions, including:
 - The Asian Development Bank initiative in Georgia, which supports affordable housing financing for women.
 - Blockchain4Her by Bitget, which focuses on women’s empowerment in Web 3.0 through mentorship, funding, education, and networking.
 - The World Bank’s Gender Portal, which centralizes global data,

resources, and gender-focused project insights.

- Policy guidance of the OECD-INFE (Organisation for Economic Co-operation and Development – International Network on Financial Education) and other financial inclusion frameworks by the World Bank.
- At the same time, a significant number of respondents (67%) reported no awareness of international programmes in this field, mirroring the earlier quantitative findings.
- One organization explicitly expressed interest in implementing such programmes locally, emphasizing a demand for international collaboration and knowledge transfer.

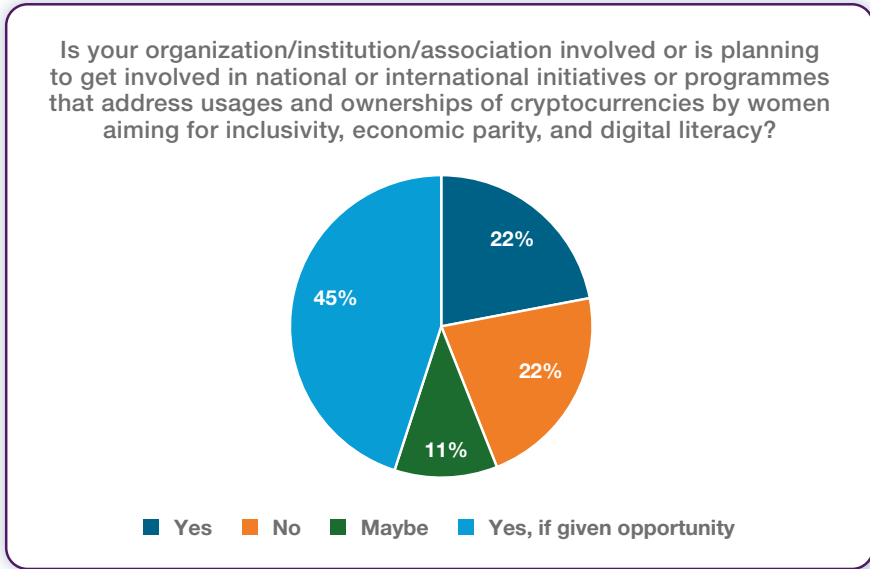
These findings illustrate both existing engagement with global initiatives and a clear appetite for broader involvement.

Strengthening international outreach and fostering partnerships with local actors could help bridge awareness gaps and ensure more inclusive participation in global gender-focused financial education efforts.

Organizational involvement in cryptocurrency initiatives for women

The survey results show varied engagement levels in national and international initiatives addressing women’s use and ownership of cryptocurrencies for inclusivity, economic parity, and digital literacy. While 22% of respondents are already involved or planning involvement, another 22% are not. Additionally, 11% are uncertain, and 44% express interest if given the opportunity. These findings suggest significant potential for increased participation through targeted awareness and support programmes.

Table 22



Willingness to participate in follow-up interviews

Findings indicate that 44% of respondents are open to providing more detailed insights through

follow-up interviews, while 56% are not. Disaggregating the data based on country reveals varying levels of interest: Azerbaijan and Georgia each have the highest willingness at 40%, followed by Armenia at 20%,

while no respondents from Moldova expressed interest. This suggests regional differences in engagement, highlighting potential areas for increased outreach and participation efforts.

Table 23

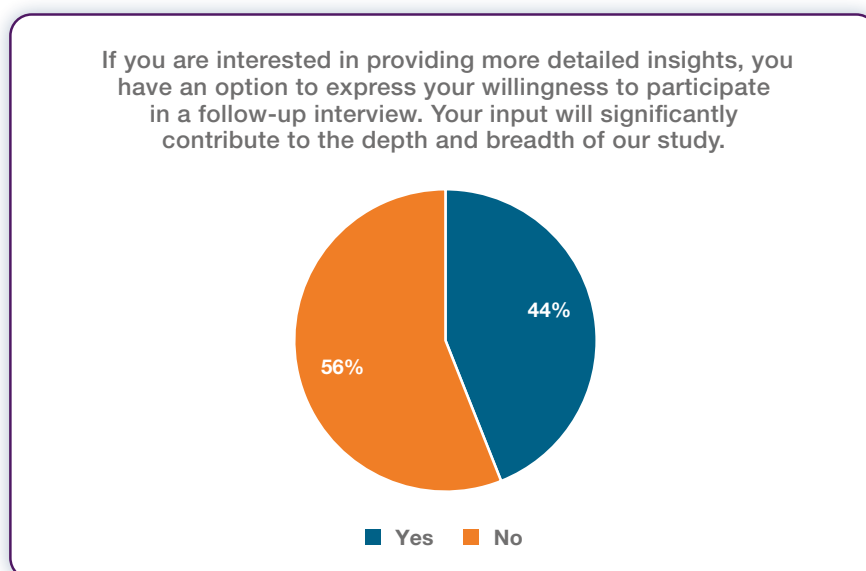
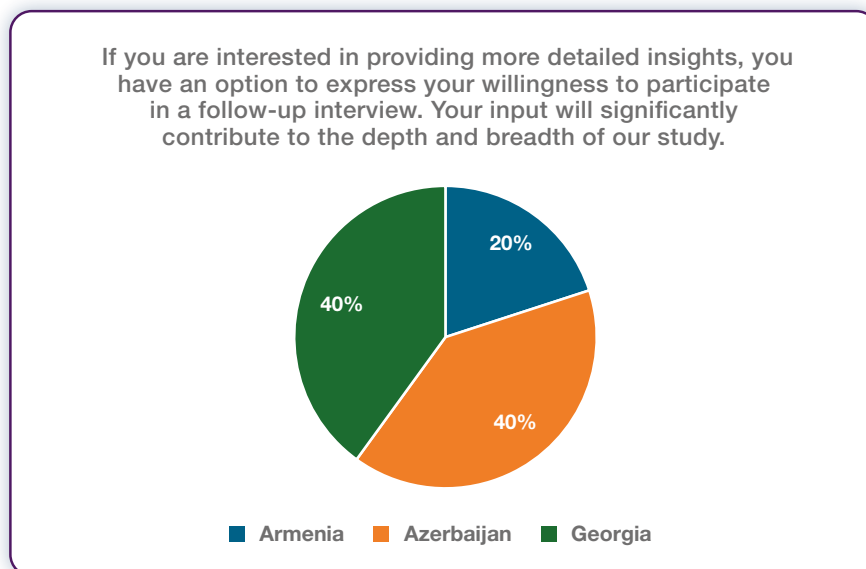


Table 24

Distribution of responses based on country

Moldova: no responses were received from Moldova-based organizations.



Of the nine respondents, several expressed interest in further engagement.

- One respondent explicitly confirmed their willingness to participate in a follow-up interview.
- Another respondent indicated strong interest, sharing that their organization is beginning a project with UNDP on women in finance. They extended an invitation for future collaboration and offered support through shared insights. Their contact details are available for OSCE.

- Two additional respondents provided contact emails for the OSCE, suggesting openness to future communication.

In addition, participants were asked if they wished to receive the final outcomes of this study after it is publicly available. While responses to this specific question were limited, some respondents provided contact information and expressed interest in collaboration, indicating a willingness to remain engaged with the study's findings and contribute to its long-term impact.

Additional comments and recommendations from respondents

At the conclusion of the survey, respondents were invited to share any further comments related to the topic of women's economic empowerment, digital literacy, and the gendered use of cryptocurrencies. While most entries were left blank or minimal (e.g., "thanks"; "-"), a few responses provided meaningful insights and potential avenues for future engagement.

One organization emphasized the importance of knowledge-sharing and tool dissemination, particularly in the Georgian context:

- “It would be good to share with our organization, which is one of the flagship NGOs in Georgia, any innovative tools for bridging the gender gap in terms of economic empowerment. We also have over 20 years of experience of working on disadvantaged groups, like ethnic and religious minorities and also young people.”

Another contribution came from the NGO in Armenia:

- “We have consulted many web3 startups and individuals, including women. We will be happy to learn more about any initiatives on the above topic.”

Collectively, these responses underscore a readiness among select organizations to not only participate

in but also help scale initiatives that foster inclusivity in the emerging digital economy. Establishing channels for resource-sharing, peer learning, and multi-stakeholder collaboration could further strengthen impact across regions and demographic groups. While the response rate was limited, the insights gathered offer valuable perspectives on the current state of gender engagement and financial education in the virtual assets sector.

Key findings indicate that:

- A majority of respondents (89%) have organized educational events focused on women in the past five years, demonstrating their active role in raising awareness and providing resources for women’s financial empowerment.
- A significant proportion (89%) of the surveyed organizations have been involved in international collaborations for educational

initiatives, with varying levels of engagement across the four countries.

- While 67% of respondents are actively engaged in addressing gender disparities in finance and Web 3.0, the remaining 33% of organizations represent an opportunity for increased outreach and participation.
- Awareness of national and international educational programmes addressing financial inclusion and the gender gap in virtual assets is limited, with only small percentages of respondents (11% and 33%, respectively) reporting knowledge of such initiatives.
- Interest in participating in cryptocurrency initiatives targeting women is substantial, with 44% of respondents expressing interest if given the opportunity.

Recommendations for OSCE Actions

Recommendations for OSCE Actions

Addressing the gender gap in the ownership and use of cryptocurrencies requires not only innovation within the private sector, but also strong, sustained collaboration with public institutions and NGOs. Governments and public sector bodies across the region are playing a critical role in shaping inclusive financial ecosystems, setting regulatory frameworks, and driving gender-responsive policy design. Strategic partnerships with ministries, central banks, financial regulators, and municipal authorities can significantly enhance the reach and impact of digital financial inclusion initiatives – especially for women and marginalized communities.

The OSCE has multiple opportunities to strengthen its co-operation with public sector stakeholders to foster enabling environments where women can safely and confidently engage with cryptocurrency and other digital financial tools. Drawing from recent regional developments and gender equality efforts led by the public sector, there are several key areas where co-ordinated action and technical support can lead to meaningful change.

To address the gender gap in the ownership and use of cryptocurrencies, the OSCE can play a catalysing role by advancing inclusive policy dialogue, strengthening capacity-building efforts, and fostering multi-stakeholder collaboration across its participating States.

The OSCE can prioritize gender-responsive digital and financial literacy programmes that demystify blockchain technologies and cryptocurrency use. Such efforts might include:

- Target women and marginalized groups through tailored training that builds foundational knowledge of digital assets, cybersecurity, and investment risks.
- Integrate gender perspectives into broader digital economy education, ensuring content is inclusive, accessible, and sensitive to diverse learning needs.
- Collaborate with academic institutions and local educational providers to co-create curriculums that reflect regional realities and technological developments.

Non-profit organizations, especially those working at the grassroots level, are uniquely positioned to reach underrepresented communities. Moreover, Women in Tech communities have created safe spaces and have built a large network of women who are potential audiences and target groups of OSCE actions for empowering women. The OSCE could:

- Support and scale NGO-led initiatives promoting women's digital inclusion and economic empowerment through

cryptocurrency education and access;

- Provide funding and technical assistance to civil society partners delivering financial literacy, legal aid, or capacity-building programmes for women in the digital economy;
- Facilitate knowledge exchange platforms where NGOs can share good practices, challenges, and data on closing the gender gap in digital finance.

Public-private partnerships are essential for ensuring that cryptocurrency products, platforms, and services are designed with inclusivity in mind. The OSCE could:

- Engage fintech companies, crypto exchanges, and blockchain developers to promote inclusive innovation and user-friendly tools for women and underserved populations;
- Encourage responsible product design through consultations on gender-sensitive features (e.g., multilingual interfaces, low-barrier onboarding processes, enhanced customer support);
- Work with private sector actors to promote transparent data collection on gender disaggregated use of digital assets to enable better-informed policies and interventions.

Key areas of action

Educational initiatives

Increase awareness and visibility of educational programmes –

Governments, financial institutions, and organizations can collaborate to raise awareness about national and international educational initiatives focused on financial inclusion, female investments, and the gender gap in virtual assets. By improving the visibility and accessibility of such programmes, women will have the resources to engage in financial literacy and digital asset education. The OSCE can support these efforts by prioritizing gender-responsive digital and financial literacy programmes that target women and marginalized groups with tailored training on blockchain technologies, cryptocurrency use, and cybersecurity.

Targeted initiatives for women in virtual assets –

Developing more educational initiatives specifically aimed at women is crucial for bridging the gender gap in the virtual assets sector. Such programmes can focus on cryptocurrency ownership, digital financial literacy, and economic parity, thereby addressing the barriers women face in accessing financial and digital asset markets. The OSCE can support such initiatives by integrating gender perspectives into broader digital economy education, and by collaborating with local educational providers to co-create curricula that reflect regional realities and technological developments.

Collaboration with the private sector

Encourage greater involvement from virtual asset service providers (VASPs) –

Although VASPs have shown limited engagement until now, their involvement is essential for promoting financial literacy and inclusivity. The OSCE can encourage VASPs to partner with local institutions, NGOs, and women-focused organizations to create accessible educational programmes that cater to the needs of women in the virtual assets space. Public-private partnerships can be fostered, with fintech companies, crypto exchanges, and blockchain developers promoting inclusive innovation, user-friendly tools, and gender-sensitive features.

Partnerships with the public sector, non-profit organizations and women in tech communities

Regional co-operation and cross-border partnerships –

To foster a unified approach to addressing gender disparities in the virtual assets sector, regional co-operation between Armenia, Azerbaijan, Georgia, and Moldova is vital. Cross-border partnerships can amplify the impact of educational programmes and provide more diverse learning opportunities for women. NGOs, especially those working at the grassroots level, are well-positioned to reach underrepresented communities. The OSCE can facilitate knowledge

exchange platforms for sharing good practices, challenges, and data on closing the gender gap in digital finance.

Support for women in tech communities and non-profit organizations –

Tech communities and non-profit organizations have a critical role in supporting women in digital finance. The OSCE can scale NGO-led initiatives promoting the digital inclusion and economic empowerment of women, and offer funding and technical assistance for capacity-building programmes. Collaborating with these communities can help create safe spaces for women to learn and thrive in the tech and finance sectors, which will contribute to a more inclusive digital economy.

Promote research

Data collection and future research –

Future surveys should focus on expanding sample sizes and gathering comprehensive participation from VASPs and other relevant stakeholders. Such data will help identify challenges and opportunities for women in the virtual assets market, enabling the refinement of existing initiatives and the development of effective strategies. Promoting transparent data collection on gender-disaggregated use of digital assets would also support better-informed policies and interventions to address gender gaps in financial literacy and digital finance.



The OSCE's Virtual Assets Support Initiative

The OSCE's Virtual Assets Support Initiative

This study was conducted under the framework of the OSCE extrabudgetary project Innovative Policy Solutions to Mitigate Money Laundering Risks of Virtual Assets. The project aims to

support OSCE participating States in addressing the evolving challenges posed by virtual assets through evidence-based research, policy development, and capacity-building.

It is generously funded by the Governments of Germany, Italy, Poland, Romania, the United Kingdom, and the United States.

About the author

This review was conducted by Malgorzata Kowalska. She is an expert on virtual assets with the Organization for Security and Co-operation in Europe (OSCE), where she supports OSCE participating States to develop regulatory frameworks and risk-based approaches to virtual assets and related technologies. With a strong background in compliance and financial crime prevention, she has previously held senior roles at a virtual asset service provider (VASP), where she gained first-hand experience

in navigating the operational and regulatory challenges of the crypto space. As an advisor to various blockchain and crypto projects, Kowalska has been instrumental in shaping compliance strategies, AML/CFT programmes, and fostering dialogue between the public and private sectors on responsible innovation. Her expertise bridges the gap between fast-moving fintech innovation and robust regulatory oversight. In addition to her policy and compliance work, Kowalska is also

the co-founder of two Sweden-based initiatives – SmartCoding and FemHire – dedicated to supporting women in tech. Through programming courses and talent matchmaking, these entities work to bridge the gender gap in tech by promoting inclusive hiring and building diverse tech teams across the IT industry. Her overall expertise bridges the gap between fast-moving fintech innovation and robust regulatory oversight, while also championing equity and inclusion in the tech ecosystem.

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Glossary

Adoption of cryptocurrency/ User adoption

Cryptocurrency adoption refers to the process by which individuals, businesses, and institutions begin to use cryptocurrencies for transactions, investments, or other financial activities, signaling increased acceptance and integration into the broader economy.

Blockchain

A decentralized digital ledger that records transactions across a network of computers in a secure, immutable, and transparent manner. It is the foundational technology behind cryptocurrencies.

Cryptocurrency

A type of digital or virtual currency that uses cryptographic techniques to secure transactions and control the creation of new units. Examples include Bitcoin (BTC), Ethereum (ETH), and stablecoins like USDC.

Crypto/digital wallet

A digital tool (software or hardware) that allows users to store, send, and receive cryptocurrencies. Wallets can be custodial (controlled by a third party) or non-custodial (controlled solely by the user).

Decentralized finance (DeFi)

A system of financial applications built on blockchain networks that operate without traditional intermediaries like banks, offering services such as lending, borrowing, and trading.

Digital finance

Digital finance refers to the delivery of financial services through digital technologies, including mobile devices, online platforms, and

blockchain systems. It encompasses areas such as digital payments, online lending, virtual assets, and digital banking, enabling faster, more accessible, and often more cost-effective financial transactions and management.

Digital literacy

The ability to understand and use digital tools effectively, including navigating online platforms, managing digital wallets, and safely interacting with crypto-related technologies.

Financial inclusion

The availability and equality of opportunities to access financial services. In the context of crypto, it refers to the potential for virtual assets to serve populations traditionally excluded from financial systems.

Financial literacy

Financial literacy is the ability to understand and effectively use financial skills, including budgeting, saving, investing, and managing personal finances. It empowers individuals to make informed and responsible financial decisions.

Fintech

Financial technology, or fintech, refers to the use of innovative technology to deliver financial services and products. It encompasses a wide range of applications, including digital payments, blockchain, online banking, investment platforms, and financial management tools, often aiming to improve efficiency, accessibility, and user experience in the financial sector.

Gender gap

The disparity between individuals of different genders in terms of access,

participation, or outcomes – in the context of this report, it relates to the ownership, use, and benefits of cryptocurrencies.

Internet penetration

Internet penetration refers to the percentage of a population that has access to and uses the internet. It is a key indicator of digital connectivity and access to online services within a country or region.

Non-fungible tokens (NFTs)

NFTs are unique digital assets that represent ownership of specific items such as art, music, videos, or virtual goods that are stored and verified on a blockchain. Unlike cryptocurrencies, NFTs are not interchangeable, making each token distinct in value and identity.

Ownership (of cryptocurrency)

Having control over digital assets, typically through possession of private keys or access to a crypto wallet. Ownership implies the ability to transfer or use crypto assets.

Stablecoin

A type of cryptocurrency that is typically pegged to a stable asset, such as a fiat currency (e.g., USD or EUR), to minimize price volatility. Stablecoins are widely used for transactions, remittances, and as a store of value within the crypto ecosystem. For more information, see: Investopedia – Stablecoin Definition (<https://www.investopedia.com/terms/s/stablecoin.asp>)

Socioeconomic profile

A socioeconomic profile is a summary of an individual's or group's social and

economic characteristics, such as income level, education, occupation, gender, and access to financial services, which help understand their behaviour, opportunities, and challenges in various contexts.

Token

A unit of value issued on a blockchain. Tokens can represent various assets or utilities and are used in different applications, including governance, access rights, or rewards.

Web 2.0

Web 2.0 refers to the second generation of the internet, characterized by interactive platforms and user-generated content. It

enabled social media, e-commerce, and dynamic websites, allowing users to create, share, and engage with online content in real time.

Web 3.0

Web 3.0 is a vision for a decentralized internet built on blockchain technology, where users own their data and digital assets, and interact via decentralized applications (dApps).

Virtual asset

A broad term referring to any asset that exists in a digital form and has value, including cryptocurrencies, tokens, NFTs (non-fungible tokens), and other blockchain-based instruments.

Virtual asset service provider (VASP)

An individual or business that conducts one or more of the following activities involving virtual assets: exchange between virtual assets and fiat currencies; exchange between one or more forms of virtual assets; transfer of virtual assets; safekeeping and/or administration of virtual assets or instruments enabling control over them; and participation in and provision of financial services related to an issuer's offer and/or sale of a virtual asset. VASPs are subject to anti-money laundering (AML) and counter-terrorist financing (CTF) regulations under the Financial Action Task Force (FATF) framework.



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