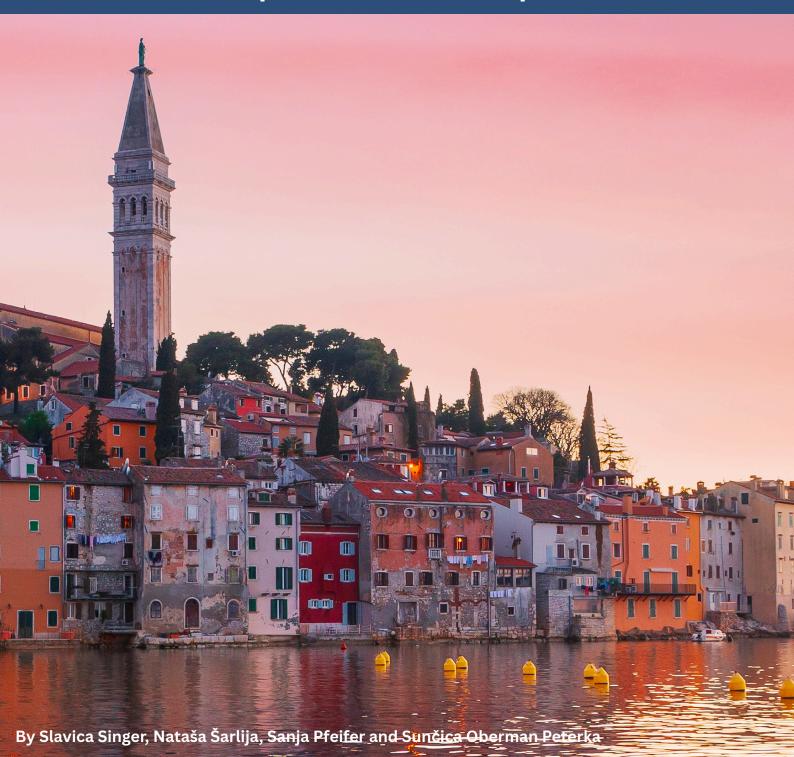


FROM POST-WAR RECOVERY TO POLICY REFORM:

How GEM Croatia is strengthening national entrepreneurial development



Introduction

GEM Croatia can proudly claim a role in supporting the country's economic development following the devastating Balkan War of the 1990s. Croatia faced an economic crisis marked by massive unemployment, collapsed industries, and widespread uncertainty. The need for economic development was urgent, but immediately postwar, discussions were focused on the provision of humanitarian aid, not on assuring long-term recovery.

However, there was a turning point in 2001. A meeting with GEM co-founder Paul Reynolds of Babson College and London Business School led to Croatia joining the third GEM research cycle in 2002. Backed by strong conviction and persistence, GEM Croatia eventually secured the support of the Ministry of Entrepreneurship and SMEs to begin the country's first comprehensive entrepreneurship data collection effort.

Progress, challenges and opportunities

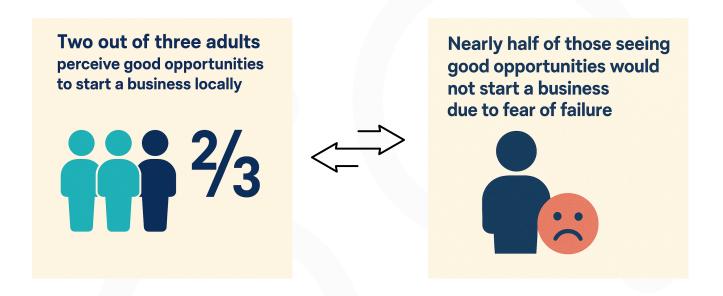
In the early 2000s, Croatia's entrepreneurial landscape was defined by survival-oriented activity, limited policy infrastructure, and weak support systems for small businesses. There was little coordination between stakeholders, and innovation ecosystems were underdeveloped. Over time, GEM Croatia became a consistent and credible source of data enabling the tracking of entrepreneurial trends, highlighting not only gaps in activity, but also systemic weaknesses in areas like R&D transfer, access to financing, and entrepreneurial education.

GEM Croatia data has shed light on important entrepreneurial shifts over the years since the end of the aforementioned war. For example, GEM Croatia has tracked a breaking point in intensifying entrepreneurial activity (measured by TEA – Total early–stage Entrepreneurial Activity, the percentage of the adult population active in starting a business) and building entrepreneur confidence in their own skills over two decades, as presented in this table:

Year	TEA	Skills
2002	3.6%	39.6%
2012	8.3%	44.1%
2022	13.2%	73.6%
2024	13.1%	73.8%

In 2024, nearly three out of four adults who took part in the GEM Adult Population Survey in Croatia confirmed that they knew someone who had started a business in the previous two years, or considered themselves to possess the skills and knowledge to start their own business.

Two out of three adults perceive good opportunities to start a business locally, though nearly half of those seeing good opportunities would not start a business due to fear of failure.



The quality of the overall entrepreneurial environment in Croatia, as assessed by its own national experts, weakened significantly in 2024, with its National Entrepreneurial Context Index (NECI) score falling from 4.3 in 2023 (ranked 31st out of 49 economies) to 3.9 in 2024 (ranked 48th out of 56 economies). This may be due to worsening scores for several components of the ecosystem (government programmes for entrepreneurship, ease of getting financial resources, education for entrepreneurship, and innovation and development transfer).



Osijek from above, photo taken by Boris Pererka

Informing national strategy

Since joining GEM, Croatia has built one of the most data-informed entrepreneurial ecosystems in the region. GEM data is referenced in major national strategy documents related to <u>entrepreneurship</u>,¹ women's entrepreneurship,² <u>social enterprise</u>,³ and education. From 2021, the National Plan for Recovery and Resilience 2021–2026 integrates all specific entrepreneurship policies.

For years, GEM findings provided early warning about low entrepreneurial activity, lack of opportunity-based ventures (thus, motivation), the small share of growing businesses, and the consistently weak components of the ecosystem in which future and existing entrepreneurs carry out their activities (such as R&D transfer, government policies on regulatory framework, education, etc.).

Over time, GEM Croatia research has impacted policy interventions. Among the highlights over almost 25 years are the following:

From the beginning, dominant financial support from the government was provided to those pursuing self-employment, followed by programmes aimed at those starting a formal business, with a particular emphasis on supporting women and young people. The Croatian Ministry of Economy; the Croatian Agency for SMEs, Innovation and Investments (HAMAG-BICRO); and the Croatian Bank for Reconstruction and Development were all involved.

For years, GEM findings highlighted that focusing solely on the startup phase while neglecting other stages of the venture life cycle had become a critical bottleneck to building resilient and competitive Croatian SMEs. As a result, the Ministry of Economy and HAMAG-BICRO introduced programmes to support innovativeness, internationalisation, and collaboration between the academic research sector and SMEs.

GEM Croatia findings consistently point to weak collaboration between academic research institutions and SMEs, which is crucial for intensifying innovative activities of SMEs and their competitiveness. In response, the Ministry of Economy and the HAMAG-BICRO began in 2019 to offer "innovation vouchers" in which SMEs can apply for financial support and collaboration with researchers from the academic sector. This was based on the experience of the innovation vouchers introduced in 2004 by the Netherlands. For the first year of this initiative in Croatia, 280 projects were supported. The aim of the <u>programme</u>, still taking place today, is to develop a demand for collaborative projects with research institutions, focusing on developing new products, processes, or services.

¹ National Plan for Recovery and Resilience - Croatia, 2021-2026, p. 161, p. 166.

² The Croatian Ministry of Economy regularly uses GEM indicators for analysing women entrepreneurship activities in Croatia, especially in monitoring the gender gap (connected to the UN SDG 4, Promotion of women's entrepreneurship).

³ <u>Strategija razvoja društvenog poduzetništva u Republici Hrvatskoj za razdoblje 2015-2020.</u>
(<u>Development strategy of social entrepreneurship in the Republic Croatia for 2015-2020)</u>

Two additional programmes focused on strengthening competitiveness of SMEs were introduced in 2021:

- Digitalisation of SMEs (resources) and Vouchers for Digitalisation (skills), 2021-2026
- Transition to energy efficient business models of SMEs (introduction of new technologies), 2021–2026.

It is also noteworthy that the Croatian Ministry of Economy and HAMAG-BICRO reacted positively to GEM findings and recommendations related to the professional infrastructure needed to support entrepreneurs along the life cycle of their ventures. The <u>pilot project BOND (Business Organisations Network Development)</u> was launched on 1 July 2017.

It connects entrepreneurial support institutions in Croatia, improving the quality of existing services, developing new services, and ensuring that the same quality of services are available to all entrepreneurs across Croatia (not only in big urban centers) according to the guidelines of the Entrepreneurship Development Strategy of the Republic of Croatia 2013–2020. This programme covers a portfolio of non-financial support (training, mentoring, counselling), which is continued in the National Plan for Recovery and Resilience 2021–2026.

In terms of education systems, GEM Croatia from the very beginning connected the intensity of entrepreneurial activity, especially starting a venture, with education for entrepreneurial competences of individuals. Since 2002, a consistent pattern has been observed: individuals with higher levels of education in entrepreneurial competences are more active entrepreneurially. It is used as a strong argument in national discussion on reforming educational systems, by embedding entrepreneurship education across school curricula (not as separate, silo-designed courses). GEM findings are used to back reforms, and there are many examples of introducing education for entrepreneurial competences in primary, secondary and tertiary educational programmes (see Lzvješće o malim i srednjim poduzećima u Hrvatskoj – 2024 / Report on small and medium-sized businesses – 2024, p.74–85). 4

The interdisciplinary interuniversity doctoral program Entrepreneurship and Innovativeness at the J.J. Strossmayer University in Osijek is using the GEM conceptual framework and GEM database when searching for research questions related to entrepreneurship phenomena. Two fold outcomes emerged from the research activities performed in this program: academic contribution to scientific discussion on entrepreneurship and empirically verified relevance for designing evidence-based policies.

⁴ https://www.cepor.hr/wp-content/uploads/2025/05/Cepor-lzvjes%CC%8Cc%CC%81e-2024-WEB.pdf

⁵ The program is based on signed agreement of collaboration among J.J. Strossmayer University in Osijek, Croatia; Durham University, UK; University of Turku, Finland; University of Klagenfurt, Austria and University of Maribor, Slovenia

Building with evidence, not assumptions: The GEM Croatia approach

In 2001, GEM Croatia was launched in response to a national need. The war and very corrupted privatisation process had left deep scars on the economy. Entrepreneurial policy was largely absent. GEM Croatia believed that the only way to move forward was through leveraging data. Credible, internationally benchmarked, longitudinal insights from GEM could guide evidence-based decision-making.

GEM Croatia's approach was grounded in collaboration from the start. The team worked closely with ministries, development agencies and with the Croatian Banking Association, not only to present data but also to build a shared understanding of the challenges and barriers to be addressed. Each GEM Croatia annual report came with recommendations. CEPOR (SMEs and Entrepreneurship Policy Center in Croatia) publishes the only state-of-the-art report on small and medium-sized businesses and entrepreneurship in Croatia. The Small and Medium Enterprises Report – Croatia has included GEM findings to enrich statistical data annually since 2011.



Slavica Singer, head of GEM Croatia



Nataša Šarlija, Professor and member of the GEM Croatia National Team

Presentations to policymakers were not merely passive briefings; they were invitations to dialogue. Over time, this built trust that resulted in effective action. The Ministry of Economy began funding GEM Croatia, and GEM findings informed everything from startup support programmes to the introduction of innovation vouchers. GEM data was also used at the regional level, thus helping to shape sub-national development strategies. For example, the Development Strategy for the City of Osijek 2014–2020: From Industrial to Intelligent City, recommended using GEM indicators on venture creation and business growth intensity to monitor economic development.

This work required persistence and patience over time. Even when hard data is presented, policy change is not automatic. But because of a long-term approach and consistent effort, Croatia has seen the results: rising TEA rates, stronger confidence among potential entrepreneurs, and a much more inclusive conversation around what entrepreneurship means in Croatia.

Lessons

After two decades, the team can share several important insights with entrepreneurship researchers, and other GEM National Teams.

First, never underestimate the power of a well-delivered presentation. The first GEM Croatia meeting with the Ministry was scheduled to last only 20 minutes. The focus was on showing the relevancy of the data and how it could help shape smarter, more targeted support for SMEs. That first conversation changed the trajectory of entrepreneurship policy in Croatia. Know your audience, but also believe in your data.





Second, continuity is everything. A single report can be ignored, but over 20 consecutive years of data cannot be overlooked. This is why it is important that GEM National Teams consistently participate in the research year-on-year. Credibility does not come from volume; it comes from showing up, every year, with insight and consistency. This allows policymakers to see patterns, not just snapshots. Plan for longevity. Think in terms of decades, not project cycles.

Third, local relevance matters as much as global methodology. GEM provides a powerful international framework. However, it is up to each national team to connect the data to local narratives. GEM Croatia always tied its findings to current policy debates, economic developments, and cultural attitudes. The more that data is grounded in the lived reality of a country, the more likely it is to resonate.



Finally, GEM's work is deeply human. Behind every dataset is a story. It may be of an aspiring entrepreneur or a struggling region. GEM is not just about collecting numbers; it's about changing lives through providing insight to relevant players such as policymakers. GEM is not only a research project but a research based platform providing effective activities in rebuilding and reimagining the future of Croatia.

Looking ahead

Over more than two decades, GEM Croatia has proven that data, when aligned with purpose and policy engagement, can play a transformative role in national development. Moving forward, the team's goal is to strengthen its capacity and capability to serve as a reliable contributor to Quintuple Helix collaboration (academia, government, business, civil society, and the planet) in advancing the UN Sustainable Development Goals.

The perceptual nature of GEM data offers a vital perspective on the policy implications for the well-being of people and the planet. GEM Croatia is committed to improving the GEM conceptual framework and expanding the portfolio of GEM indicators.

GEM datasets for Croatia from 2002 enable policymakers to access insights into trends and patterns of entrepreneurial phenomena (intentions, opportunity recognition, fear of failure, entrepreneurial activity along the life-time phases of a venture, values, etc.). Data literacy is essential to fully benefit from GEM data when designing and monitoring entrepreneurship policies.

To strengthen its impact, GEM Croatia plans to work more intensively with policymakers, drawing on research-based results and good practices from other countries to demonstrate the relevance of GEM data in shaping better policies and programs. This effort, rooted in Quintuple Helix collaboration, aims to contribute to the well-being of people and the planet.

