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# **Islamic Moral Economy & Finance 2025**

**Managing the Cost of Living:  
The Role of Islamic Finance in Daily Life, Tax-Aware  
Financial Practices, and Sustainable Development**

**Novi Pazar, Serbia  
Oktobar 2, 2025**

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**Novi Pazar, October 2, 2025**

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 МИНИСТАРСТВО НАУКЕ,  
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## ABOUT THE CONFERENCE

The International Scientific Conference titled “Managing the Cost of Living: The Role of Islamic Finance in Daily Life, Tax-Aware Financial Practices, and Sustainable Development” was successfully held on October 2, 2025, in the historic city of Novi Pazar, Serbia. This significant event was organized through a joint collaboration between the University of Novi Pazar (Serbia), the University of Dundee School of Business (UK), and the International Waqf Fund (Islamic Relief Worldwide). The conference convened a diverse group of colleagues, researchers, practitioners, and students to address critical economic and ethical intersections.

The rationale for this conference was grounded in the recognition that the world was experiencing a convergence of profound economic and ecological challenges. Participants addressed the reality that individuals and societies were being tested in unprecedented ways, ranging from the daily pressures of rising living costs, inflation, and increased taxation to the long-term threats of climate change and resource depletion.

With a global population exceeding 8 billion, the conference highlighted the strain placed on finite natural resources and fragile ecosystems. It was noted that dominant economic models built on linear consumption (“take, make, dispose”) continued to drive overproduction, waste, and inequality, contributing to global instability and environmental harm.

Against this backdrop, the search for sustainable, just, and balanced systems was identified as urgent. The circular economy was explored as a powerful framework for addressing ecological and economic imbalances, offering strategies focused on reducing waste, regenerating resources, and prioritizing reuse, repair, and recycling. However, the prevailing consensus was that true sustainability demanded more than technological fixes or market efficiency; it called for a deeper ethical and spiritual transformation.

The conference underscored the fundamental Islamic notion of *mīzān* (balance). Discussions frequently referenced the Qur’anic injunction: “And the heaven He raised and imposed the balance (*mīzān*), that you not transgress within the balance” (Qur’an 55:7-8). This concept of divine balance was applied not only to nature and ecosystems but also to human behaviour, economic activity, and collective responsibility toward creation (*khalq*). Resources granted by Allah (s.w.t.) were viewed as a trust (*amānah*), to be used with care, moderation, and justice.

The papers collected herein demonstrate how Islamic ethics offered a holistic framework for managing the cost of living in both material and moral terms. Values such as *avoiding* waste (*isrāf*), promoting moderation (*wasatiyyah*), eliminating harm (*ḍarar*), and ensuring fairness were shown to resonate deeply with the principles of the circular economy.

Islamic finance was highlighted as playing a vital role in actualizing these values. Grounded in risk-sharing, real economic activity, and social justice, Islamic finance provided a set of tools, from *zakat*, *waqf*, and *qard hasan* to profit-and-loss sharing and ethical investment, mobilized to ease the financial burdens of everyday life.

The conference successfully brought together scholars and policymakers to explore how these instruments could manage economic realities, from inflation to sustainability. By examining the intersection of Islamic finance with everyday financial practices, the contributions in this volume aimed to advance solutions that were not only economically viable but also spiritually grounded and ecologically just, aligned with the divine balance that underpins all aspects of life.



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## FOREWORD BY THE EDITOR

Welcome to Novi Pazar for IMEF 2025, a vision realized by my esteemed colleagues Alija Avdukić, Muhammad Al-Saghir, Haris Zogić, and myself. Our goal was to create a leading international platform for Islamic moral economy and finance here. I am proud of our progress since the first conference, which has successfully brought together diverse global experts. Your attendance highlights the growing importance of Islamic economic principles for a more equitable and sustainable future.

At this crucial juncture in human history, we face profound economic and ecological challenges. Our world grapples with rising costs, inflation, wealth disparities, climate change, resource depletion, and biodiversity loss. These unprecedented tests strain global systems, demanding a re-evaluation of priorities and a fundamental shift in approach.

The continuous growth model of GDP, often hailed as the sole measure of progress, is proving unsustainable in the long run. We must acknowledge the undeniable mathematical reality: an average growth of 5% doubles economic activity every 14 years, and even a modest 2% growth doubles GDP every 35 years. This raises a critical question: From where will the resources for this relentless growth be sourced? Have we truly considered the origins of materials for our everyday consumer goods, like our mobile phones? What environmental and social impacts will our consumption patterns create?

The "take, make, dispose" linear consumption model has advanced some developed nations, but at the cost of global instability, environmental damage, and inequality. True sustainability requires a profound transformation in human behaviour and our relationship with the planet and each other.

At its core, our life is a series of choices. Therefore, we must honestly ask ourselves: Are we really willing to change our behaviour? Do we truly consider the long-term implications of our actions, or are we consistently swayed by short-term gains and immediate gratification? Contemporary economics textbooks often resemble weather reports, passively observing phenomena. We speak of an "invisible hand" guiding the market, implying a lack of human agency. However, market mechanisms are the result of human actions, decisions, and values, and we cannot evade our responsibility. Thus, we firmly believe that the crisis we face extends beyond carbon emissions or waste management; it is a crisis of character and ethics, a crisis of our collective moral compass.

Our economy needs a fundamental shift. Instead of being driven by unlimited desire and self-interest, it must be founded on cooperation and our real human needs. We bear a profound responsibility to integrate ethics into our behaviour by redesigning our habits, values, and priorities.

From an Islamic perspective, divine balance governs not only nature and ecosystems but also human behaviour, economic activity, and our collective responsibility toward creation. The resources granted by Allah (s.w.t.) are a trust, to be used with care, moderation, and justice. Islamic ethics offers a holistic framework for

managing the cost of living, both materially and morally. Values such as avoiding waste, promoting moderation, eliminating harm, and ensuring fairness in transactions are deeply embedded in Islamic thought and resonate with the principles of the circular economy.

It is with great pleasure that we present this collection of research, which collectively explores the intersection of ethical frameworks, Islamic principles, and contemporary socio-economic challenges. The papers included in this volume navigate complex landscapes, from financial inclusion in Scandinavia to sustainability in the Balkans, demonstrating how traditional values can offer robust solutions to modern problems in economics, technology, and social integration. A central theme of this edition is the vital role of inclusive financial systems. Sarah A. Tobin investigates the barriers faced by Muslim immigrant entrepreneurs in Norway, highlighting how the lack of Shariah-compliant tools leads to financial exclusion. Her work argues for the implementation of profit-and-loss sharing frameworks, such as impact investment funds, to foster labour market integration and equality. Complementing this, Haris Zogić explores the mobilization of founding capital for startups, emphasizing the structural limitations of conventional debt-based financing. Zogić posits that alternative mechanisms like venture capital and crowdfunding are inherently compatible with Islamic instruments such as *mudarabah* and *musharakah*, offering ethically grounded solutions for innovation.

The volume also delves into the legal and ethical underpinnings of economic stability. Enver Gicić provides a detailed analysis of the business guarantee (*el-kefale*), framing it not merely as a legal instrument for securing obligations but as an ethical mechanism that strengthens trust and stability in business relations. On a macroeconomic level, Suad Bećirović challenges conventional monetary policy by analysing inflation as a "man-made phenomenon" often stemming from ethical misconduct. He argues that stability is best achieved through a preventative approach rooted in Islamic prohibitions against interest (*riba*) and hoarding, rather than reactive crisis management.

Beyond pure economics, our authors address pressing societal and technological issues. Šemsudin Plojović, Aida Akagić-Hodžić, and Nermina Suljević present a case study on the circular economy in Sarajevo, focusing on digital tools used to tackle food waste and promote environmental sustainability. In the realm of global commerce, Aldin Dugonjić examines the nuances of Halal marketing in non-OIC countries like Croatia, addressing the challenges of branding, certification, and the need for specialized marketing campaigns in diverse geopolitical contexts.

Finally, Ergin Hakić, Enver Međedović, and Ferid Bulić explore the dual nature of technological advancement. Their work integrates Islamic concepts, specifically the objectives of Sharia (Maqasid al-Shari'ah), to define a "citizens' security culture" capable of defending against cyber threats and disinformation while protecting individual intellect and property.

Prof. Suad Bećirović  
Editor

# **PROFIT-AND-LOSS SHARING THROUGH IMPACT INVESTMENT FUNDS: POSSIBILITY FOR BREAKING THE INVISIBLE CEILING WITH MUSLIM IMMIGRANT ENTREPRENEURS IN NORWAY**

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## **Abstract**

This paper examines the challenge of financial inclusion for Muslim Immigrant entrepreneurs in Norway. Based on a larger project of the Norwegian Research Council-Funded Project with a dataset of over 65 interviews and qualitative data collections, as well as a literature review and desk study, the paper takes the approach that an Islamic proscription against interest-based financing leads to financial exclusion for Muslim entrepreneurs in Norway, where Islamic finance tools are not offered. Research reveals that Muslim immigrant entrepreneurs are unable to access acceptable financial tools formally, and instead rely on informal avenues for financing that limit their growth potential and impede integration. The paper argues that developing and amplifying a profit-and-loss sharing financing framework through impact investment funds is one way to overcome these challenges. The paper concludes that this is of importance because the successful financial integration of immigrant entrepreneurs increases equality, labor market integration, and access to healthy workplaces, which are important aims in the UN Sustainable Development Goals.

**Keywords:** entrepreneurialism; Islamic finance; ethical finance; impact investment funds; integration; Norway

**Acknowledgements:** The research was funded by the Research Council of Norway project, “Muslim Immigrant Entrepreneurs Navigate Norway’s Financial Environment,” KSP Collaborative and Knowledge-building Project Number: 319878.

## **INTRODUCTION**

Mohammed, a 35-year-old Syrian refugee, arrived in Oslo in 2013. He worked hard to open a small grocery store with his brother and mother, using informal financing from the local mosque. The small business is doing well, but he would like to expand the business to improve his family’s living conditions and would also like to help his sister open a cafe or restaurant. Mohammed said that he would especially like the opportunity to employ other Muslim immigrants in Norway because “it can be really difficult for them to find jobs while they learn Norwegian and get settled in their new lives becoming Norwegian citizens.” However, Mohammed is reluctant to



take out a formal business loan because the interest charges (*riba*) are forbidden in Islam. He approached his local mosque for assistance, but so far there have not been any feasible financing alternatives. Mohammed has hit the “invisible ceiling” of financial exclusion that prevents Muslim entrepreneurs of micro- and small-sized businesses from growing their enterprises in Norway. Like other Muslim immigrant entrepreneurs in Norway, Mohammed feels financially excluded from growing his business and improving his living conditions and working life. He is therefore unable to contribute to the greater business community and institutions. He experiences inequalities in his integration in Norway and obstacles to fully realizing his active citizenship: “integreiring gjennom jobb (integration through job).”

Since the financial crisis of 2008, Norway has seen roughly 6,000 to 9,000 new firms established annually (Fjærli, Iancu, & Raknerud, 2013). Norway supports a strong entrepreneurial culture for small businesses through a three-pronged approach: increasing 1) access to capital at an early stage, 2) access to competence, and 3) a business-friendly environment (Norwegian Ministry of Trade, Industry and Fisheries, 2020). And it has experienced some success: there are more entrepreneurs per capita in Norway than in the USA (Chafkin, 2011). However, there is much room for improvement: these Norwegian firms are overwhelmingly micro-enterprises, most with three or fewer employees, and with a 10-year firm survival rate of 50%-60%. Norway’s efforts to promote entrepreneurship amongst immigrant populations only began in 2003, and 14% of entrepreneurs are immigrants or children of immigrants (Vinogradov, 2008).

Existing literature demonstrates that financial exclusion amongst entrepreneurs in Norway takes place because the sector fails to recognize their unique needs - as immigrants, religious congregants, according to gender, amongst other needs (Brekke, 2018; Brekke and Larsen, 2020; Lin, 2011; Ljunngren & Alsos, 2006). Specifically, religious concerns about interest-based financing (described below) prevent Muslim populations from engaging in debt-based business activities and restrict their ability to receive formal funding for their projects. Islamic financial development in Muslim-majority countries has advanced in recent decades (Jan & Asutay, 2019; Tobin, 2020b). However, most Muslim-minority countries have not developed the necessary Islamic structures to respond to the financial aspirations of the Muslim immigrant communities to help them overcome financial exclusion (Tameme & Asutay, 2012; Asutay, 2013). Most Muslim entrepreneurs in Norway depend upon mosque support, investors’ personal savings, or interest-free loans from family and friends, and this dependency severely constrains growth potential (Brekke, 2018; Brekke et.al., 2019). Importantly, the amount of financing available for these entrepreneurs is limited.

These limitations also inhibit Muslim immigrant integration in Norway, as they lack financial opportunities to become equal stakeholders in society, contribute to the development of their communities, and create value in their new country. While the UK, for example, has demonstrated a certain level of access for Islamic financial opportunities for its Muslim communities through necessary regulative and legal changes (Tameme & Asutay, 2012), Norway has not developed such structures and institutionalization. Therefore, there have been delays in Muslim communities

becoming part of economic value creation and being more fully integrated into Norwegian society as community stakeholders (Lin, 2011).

This paper explores some central aspects of Islamic financing models and formulates an explorative solution in the profit-and-loss sharing form of social impact investment funding. The incorporation of both social and financial concerns into a “doubled bottom line” addresses the questions of ethical finance by both answering entrepreneurs’ individual concerns and larger societal needs with regards to the UN Sustainable Development Goals (SDGs).

## **BACKGROUND: ISLAMIC PROSCRIPTIONS FOR PROFIT-AND-LOSS SHARING (PLS) AND MUSLIM IMMIGRANT ENTREPRENEURIAL NEEDS IN NORWAY**

Since the late 1980s, widespread consensus has emerged on one of Islamic finance’s basic contractual and technical principles, the Qur’anic injunction against *riba*, which translates literally as “increase” but is most frequently understood as “interest.” It is interpreted widely as a universal prohibition against both usurious and non-usurious rates of interest (Asutay, 2013, Brekke, 2018, Tobin, 2016a). One way that these challenges of debt-based financing can be overcome is through a profit-and-loss sharing arrangement (PLS) in an impact investment fund (IIF). This injunction against interest has resulted in two primary forms of banking and financial services, which are variations of PLS endorsed in Islam.

First is *mudaraba*, which is essentially venture capitalism: investor(s) entrust an entrepreneur with capital, who then undertakes a particular enterprise, sharing the profits with the investors; one partner contributes capital in the form of money and the other contributes only her/his business skills and services. This is the model that the Prophet Mohammed and his first wife, Khadija, are said to have exemplified in their joint commercial enterprises. *Musharaka*, the second form, is similar to *mudaraba*. However, in this second form the entrepreneur also exposes her own capital for both profit and loss, rather than solely the capital of the financier; it is the participation of two or more parties in a contracted business venture with defined amounts of capital for jointly carrying out a business and for sharing profit and loss in specified proportions. This second model is based upon the relationship established between Muslim immigrants from Mecca and locals in Medina, in which the two groups shared work and outcomes for an integrated life together. Within the contemporary Islamic finance industry, these two PLS methods constitute major contractual arrangements, generate innovative entrepreneurial ventures, and hold out great promise for Muslim immigrant entrepreneurs in Norway.

The very few studies of Muslim immigrant entrepreneurs in Norway reveal a tremendous need for Islamically-compliant financing in PLS (Brekke, 2018; Brekke and Larsen, 2020). These studies show that more than 60% of surveyed Muslim immigrant entrepreneurs strongly agreed that interest is forbidden in Islam, and 78% said that they would become customers of an Islamic bank if given the option. The sentiments were shared by the 2,000+ non-entrepreneur survey respondents at similar rates. The research was also revealing for its qualitative contributions, which

demonstrated that not only were Muslim entrepreneurs concerned about their own religious piety as it related to conventional finance, but also for the reputational risk that they would undertake by utilizing conventional finance. In other words, Muslim immigrant entrepreneurs were interested in an Islamic financial alternative because they believed it would be well-received in the community and promote integration and goodwill. The literature bears out that Islamic financial alternatives for Muslim immigrant entrepreneurs are real solutions for positive socio-economic outcomes in Norway (Brekke, 2020).

Beyond religion, gender is also an important consideration. Norway is well-known for gender equity. According to the 2020 Global Gender Gap Index Rating Report, Norway ranked second in the Gender Parity chart. Nonetheless, economics, finance, and business persist as male-dominated spheres here. According to their website, the NHH graduated 18 male PhDs and 14 females in 2017-8. 80% of entrepreneurs in Norway are male (Fjærli, Iancu, & Raknerud, 2013). One statistic suggests the picture may not be so simple or well defined: immigrant women to Norway are entrepreneurs at higher rates than their non-immigrant counterparts (Fjærli, Iancu, & Raknerud, 2013). Does this also hold true for female Muslim immigrants to Norway? We simply do not know. The picture is made even more complex by the great strides that Muslim women have achieved in Norway towards gender equality: women often enjoy much more gender-equality in their everyday lives than stereotypes suggest, with young Muslim women living more “liberally” than their parents (Nyhagen, 2004). The experiences of female Muslim immigrant entrepreneurs thus merit deeper investigation.

We know that Muslim immigrant entrepreneurs world-wide have pursued alternative Islamic funding mechanisms in the absence of formal Islamic financing, including rotating credit and saving circles, and Postal Savings (Tobin, 2016a, 2017). We know very little about how mosque congregations and leaders facilitate business contacts and networks (Brekke et. al., 2019) and need to understand how Islamic legal and moral authority concerning finance and business is communicated through different channels (cf. Bang, 2011, 2021). Some studies find that religious congregations serve as important sources of economic and social capital for entrepreneurs, across different cultural milieus (Brekke et. al., 2019). As Brekke and Larsen (2020) demonstrates, a key concern among at least some Muslim entrepreneurs in the Nordic countries is about access to Islamic finance, and his work demonstrates that Muslim entrepreneurs lack access to formal funding mechanisms consistent with their religious views. This creates the “invisible ceiling” we reference early on that, in the words of informants, prevents them from expanding their businesses.

## **LITERATURE REVIEW AND THEORY**

To underscore the role and possibility of PLS in IIF, we employ the theory of moral economies, which conceptualizes the economy as a location for normative moral action: economies are—or at least ought to be—based on goodness, fairness, and justice, and not on a “free hand” operating independently of such concerns.

Theoretically spearheaded by James Scott (1977), the moral economy literature on immigrant entrepreneurship emerged in the 1970s and 1980s as researchers explored the emergence of “ethnic enterprises.” Some of the more recent research theorizing ethnic entrepreneurship looks more specifically at the role of religion as an Islamic moral economy (see, for example: Asutay 2013, Hasan & Asutay 2014, Izhar & Asutay 2020, Asutay & Turkistani 2015, Asutay & Marzban 2015, Jan & Asutay 2019, Mergaliev, Asutay, Avdukic & Karbhari 2020; Bang 2011; Brekke 2018; Norbakk 2020; Tobin 2011, 2013, 2014, 2016a, 2019, 2020a). Frequently the Islamic moral economy literature points to compatibilities between Islam and capitalism, demonstrated by the Prophet Mohammed. As the model Islamic entrepreneur, with financing from his first wife, Khadija, the Prophet sold goods in Syria and returned to Khadija the principal payment and the agreed-upon profit. The model solidifies moral-economic compatibilities, PLS possibilities and ethical standards, and endorses gendered entrepreneurialism as well. Female Muslim entrepreneurs have responded to the example of Khadija by becoming self-employed, establishing businesses and organizations working for social change, both historically and currently. And these religious frameworks have moved with Muslim migration (Asutay, 2013): European Muslims’ demand for financing that correspond with Islamic values creates business and transnational networks based Muslim identities in the marketplace.

However, it is important to recognize that religion does not determine economic behaviour (Tobin, 2016a). The effect of religion on entrepreneurship is highly dependent on context, which includes both the financial environment and political and social realities. This is the primary finding in Dodd & Gotsis’ review of the literature that addresses the interrelationship between religion and entrepreneurship (2007). They also find that entrepreneurs with high religious adherence tend to use religious criteria to inform decision making, even at the expense of short-term commercial interests. Even long after the influence of Max Weber’s *The Protestant Ethic and the Spirit of Capitalism*, the literature that explores the influences of spirituality and religiosity on entrepreneurship concludes that there is “a rich connection between the personal values of religion and spirituality in the life of the entrepreneur and the success of their venture” (Dodd & Gotsis 2007).

In 1975 immigration laws restricted unskilled worker immigration, but enabled family reunification, education migrants (student visas), and skilled worker employment that brought in a large-number of typically well-educated immigrants that continues today (Lin 2011). Beyond this, refugees and asylum seekers have increased in recent years, with populations from Asia, Africa, the Americas, and Turkey constituting the largest percentage of immigrants. These populations also constitute the largest share of entrepreneurs: more than 44% of small shops in Oslo are “ethnic shops;” the service and food sectors are more than 50% immigrant-run; and more than 17% of immigrants become entrepreneurs (Lin, 2011). The primary supposition for this dynamic is the blocked mobility hypothesis, which states that immigrants are pushed into entrepreneurship because of structural barriers in the labour market that prevent their ability to compete on equal terms with natives (Vinogradov, 2008). The barriers may be formal discrimination such as “natives-first” hiring, or informal such as native-language policies or a lack of recognition of

foreign education and credentials. It occurs in nearly every Western country with a nearly universal outcome: immigrants become entrepreneurs at higher rates than natives (Trevizo & Lopez, 2018).

This underpins some urgency: the government, private sector, and social communities have a pressing need to understand and nurture the positive socio-economic outcomes of a larger entrepreneurial base, however venture capitalism for or non-debt financed small- and micro-enterprises are not the first industry go-to due to limited returns and high risk. This is despite the fact that the small- and micro-enterprises are socially quite promising. Entrepreneurialism is one way that socio-economic equality, healthy workplaces, financial inclusion, and immigrant integration occur. It is a potent mechanism for cultivating social and cultural capital and integrating immigrants (Aldrich & Waldinger, 1990), especially as it can create local “heroes” and valorise the social role of immigrant entrepreneurs for young people (Wolfensberger, 1972).

## **THE OBSTACLES AND PROMISES OF PLS AND IIFS IN NORWAY**

While resistance to promoting PLS alternatives in Norway may have some prejudicial linkages to immigration policy and outcomes more generally, as described above, a more immediate reason for resistance to PLS may be the challenge of obtaining and utilizing venture capital funds for micro-enterprises. As Langeland (2006) discusses, in Norway a lack of competent capital at the early development stage (e.g. moving from micro- to medium-sized enterprises) is a serious obstacle for financing innovation amongst Muslim and non-Muslim entrepreneurs alike. Further, venture capitalists, who would be necessary in the Islamic *mudaraba* arrangements discussed above, invest mainly in high-technology industries and primarily in enterprises which have a growth potential in international markets. Venture capital investments tend to be geographically clustered in urban areas, and large cities have lower transaction costs and higher potential for human capital investments, information technology support, and other innovation advantages.

The Islamic *mudaraba* arrangement also acknowledges that venture capital endeavors require more than capital to develop. The theory of moral economies shares the perspective that ethical principles of business administration and industrial knowledge coexist with business acumen, know-how, and technical competence. Some have contended that such strategic activities in venture capitalism are “actually their most important contribution to portfolio enterprises’ results” (Langeland 2006; Wijbenga et al., 2003). Venture capital is or at least should be therefore “more than money since it ensures that the enterprises get business administration experience and strategic consultancy services, as well as giving them access to financial and industrial networks” (Bygrave & Timmons, 1992; Langeland 2006).

Langeland’s study (2006) found that the Norwegian venture capital industry is “young and fairly immature.” The first venture capital firm was started in the early 1980s, but most venture capital activity in Norway is from the late 1990s. The



limited partnership model is the dominant form in Norway, and clusters overwhelmingly in cities where venture capital firms prefer “lower risk investments, improved rates of return, and add value to new ventures” (Langeland, 2006). The study finds that even regional public venture capital funds “prefer to invest within a narrower geographic scope than other venture capital firms” (Langeland, 2006).

Norway is a low-population density country with Muslim immigrant entrepreneurs residing throughout smaller cities and towns and in rural areas. Given Langeland’s findings on the importance of geographic and urban clustering as well as narrow industry diversity as strong preferences by venture capital firms, venture capital in the Islamic *mudaraba* arrangement alone as it currently stands is unlikely to assist Norway’s Muslim immigrant entrepreneurs.

However, one work around may be to turn to an Impact Investment Fund (or “Social Impact Investment Fund;” Here: IIF). In one model, IIFs effectively serve as a type of venture capital in the form of venture philanthropy. IIFs are those investments that explicitly aim to achieve “more than capital” returns or increase profit margins. They “intentionally target specific social objectives along with a financial return and measure the achievement of both” (Social Impact Investment Taskforce, 2014). They can build new markets, purchase specific social outcomes, and serve as a market steward. And IIFs are growing: as of 2014, \$45 trillion US dollars are in mainstream investment funds that have “publicly committed to incorporate environmental, social and governance factors into their investment decisions” (Social Impact Investment Taskforce, 2014). Some IIFs specifically work to target impact on the SDGs; or priorities aligned with those (see NBIM Responsible investment [www.nbim.no](http://www.nbim.no) for a publicly-aligned investment fund, or Ferd <https://ferd.no/baerekraft/hva-er-impact-investing/>; for a private one). As we discuss below, an expansion of such a financing model could serve to achieve multiple SDGs, including the umbrella focus of financial inclusion for Muslim immigrant entrepreneurs in Norway.

An IIF is a combination of capital supply and social interest, capital demand by an impact-driven industry partner, and connecting intermediaries (Social Impact Investment Taskforce, 2014). The 5 principal components of IIFs include (Social Impact Investment Taskforce, 2014):

1. Impact-seeking purchasers – these provide the sources of revenue that underpin investment in impact-driven organizations. Such purchasers can include governments, consumers, corporations or foundations.
2. Impact-driven organizations – all types of organizations which have a long-term social mission, set outcome objectives and measure their achievement, whether they be social sector organizations or impact-driven businesses.
3. Forms of finance – which are needed to address a range of different investment requirements.
4. Channels of impact capital – to connect investors to impact-driven organizations in situations where the sources of impact capital do not invest directly in impact-driven organizations.
5. Sources of impact capital – to provide the investment flows needed.

IIFs are particularly well-suited for entrepreneurs. Entrepreneurs are often interested in applying their creative energy in ways that address problems of local concerns, as

they may be rooted in their immediate communities in ways that echo those of Muslim immigrant entrepreneurs discussed above. Beyond local environs, IIFs may also help entrepreneurs scale-up ideas and concerns of a national or transnational nature. IIFs also carry tremendous flexibility that make the arrangement more attractive to investors: geographical clustering or industry diversity concerns of venture capitalists in Norway give way to asking key questions about the social impact of a small business in rural Norway, which may not otherwise be captured in financial risk assessments. A targeted focus on regional diversity; as well as thinking of niche-markets also from a social perspective may lead to less clustering and urban bias.

One example can be found in eastern Africa (Coffie, 2013). In a study of 20 entrepreneurs from Kenya and Uganda, the researcher found that socially-inclined businesses play positive roles in poor communities; that long-term capital is important for starting new enterprises; and the success of the social enterprise depends upon the technical assistance inputs. Philanthropic capital in entrepreneurial IIFs had positive effects on creating employment opportunities and increasing access to social services for the community. The study concludes that targeting socially-inclined small- and medium-sized enterprises contributes to social change.

In effect, IIFs could resemble either the Islamic *mudaraba* or *musharaka* arrangements, depending on the capital investment of the entrepreneur. IIFs cohere ethically with the intentions of Islam and moral economies, and they provide for a kind of public-private partnership that can serve interests for both social services and for a funding mechanism. A potential windfall effect of making IIF's accessible and well-known may be increased creativity and interest in social entrepreneurship, simply as it proves to be a more viable business model for immigrant entrepreneurs.

A potential shortcoming in this model may be the explicit focus on social impact, as it would exclude those entrepreneurs who are not necessarily engaging the "double bottom line," that is those who are not engaging in social impact or have the capacity to do the reporting work associated with tracing impact. In addition, the need for "measurable" impact, or "evidence-based" insight, is cumbersome (Engle Merry, 2011), as it tends to a) increase cost and labor related to reporting; and b) in some instances reduces participation to those who contribute to "measurable" impact. In some instances, it can lead to a focus on "instrumental" changes rather than "substantial" ones. This can be the case in "women's participation," where targeting the percentage of women represented in a political organization is easier to measure than say, actual decision-making power (see Tønnessen and Norbakk, 2015). And indeed, there are significant disagreements on how to measure impact, which complicates IIFs (World Economic Forum, 2013). Finance and development (in a broad understanding) can operate on different timescales, which underscores the importance for involvement from state or other public entities in order to ensure sustainability and impact-tracing beyond investment cycles.

As a form of ethical and – for Muslims – morally acceptable form of investment, the IIF model could hold great potential both for entrepreneurs and investors. For Norway's Muslim immigrant entrepreneurs IIFs may be the best workable options in the current regulatory and financial environment.

## CONCLUSIONS

Looking at IIFs from a moral economy framework challenges and even inverts the hierarchy of priorities for investors. Social impact becomes an ethical imperative and analyzing it as such could have further theoretical and applied implications. Asutay (2013) points out the moral basis for Islamic banking and finance, and his analytical framework could be further adapted to include IIFs more comprehensively especially in the case of profit-and-loss sharing investments in Muslim-owned businesses.

IIFs for Muslim immigrant entrepreneurs in Norway respond to one of the umbrella expectations of the UN-Sustainable Development Goals (SDGs), specifically financial inclusion. Financial inclusion is positively associated with poverty alleviation, entrepreneurship development, labour market inclusion, and individual and community development. Therefore, financial inclusion, as a target, through IIFs and entrepreneurship development can help meet seven additional SDGs, including: SDG1 on alleviation poverty; SDG 3 on promoting good health and well-being; SDG 5 on achieving gender equality and economic empowerment of women; SDG 8 on promoting economic growth and jobs; SDG 9 on supporting industry, innovation, and infrastructure; SDG 10 on reducing inequality; and SDG 17 through savings mobilization for investment, which can help with economic growth. Thus, the provision of Islamic finance for entrepreneurial purposes can substantiate the importance of financial inclusion.

The prospects for IIFs in PLS as an Islamic financing mechanism go beyond Muslim and immigrant communities in Norway. They shed light on the contours of challenges and obstacles that hinder all entrepreneurs from growing their enterprises and provides solutions. Enhancing IIFs for Muslim immigrant entrepreneurs in Norway will make the country a leader in the empowerment of immigrant entrepreneurs, unleashing creativity, facilitating integration, and creating value for society. Norway can become a role model in Europe, driving international political and diplomatic goodwill that stretches far beyond the immediate national rewards.

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## **CIRCULAR SOLUTIONS: TACKLING FOOD WASTE FOR A SUSTAINABLE SARAJEVO**

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### **Abstract**

Circular economy is not a new term. It has been used since ancient times in various societies, and it meant the saving, utilization of current materials and the conversion of old into new usable products. Today, this term is used in all countries all over the world, and is widely known through the implementation of different projects and activities. Some countries actively implement circular economy programs to a large extent, while in less developed countries activities in this area are less represented. Thus, economic, environmental and sustainable challenges that countries face have both negative and positive aspects. The focus of this paper is to show how the City of Sarajevo implement sustainable food consumption projects, which mean a positive step, from reducing environmental pollution, not wasting food, to donating it to charity. Digital tools used in Sarajevo to reduce food waste will also be presented. Through the analysis of strategic plans and desk analysis, the study found that the impact of different projects in the City of Sarajevo can improve the environment, make better problem-solving solutions for all citizens in Sarajevo, which will be provided in the conclusion of this paper.

**Keywords:** circular economy, sustainability, wasting food, city of Sarajevo, food consumption

### **INTRODUCTION**

The impact of circular economy is enormous, both on different sectors and on individuals now days. Although adequate procedures and regulations specifically addressing the circular economy do not yet exist, this concept is nevertheless widely



applied in many countries. Recently, it has gained notable importance, as has the term "circular economy" itself. However, let us take a step back in time and encourage reflection on the fact that many cultures historically practiced circular economy principles within their households. They repaired items instead of discarding them, conserved resources, and created innovations from old products. In this context, if we refer to it at all, the circular economy is not as new as commonly believed; rather, the term itself is recent.

Indeed, numerous initiatives have been launched in many countries, including Bosnia and Herzegovina, by government institutions, businesses, and individuals. The non-governmental sector also stands out with projects related to the circular economy, food waste reduction, and similar areas. Relevant sectors compete to better implement programs and to engage young people in starting businesses within this field. Particularly noteworthy is the City of Sarajevo, as a government institution, along with its projects and initiatives in the area of the circular economy. As one of the contemporary scientific approaches, this paper presents a case study of the City of Sarajevo and the Sector for Sustainable Development, which deals with the initiation, creation and implementation of projects at the local and international level in the field of circular economy. Moreover, the paper will present the case of the City of Sarajevo through the existence of documents that are base for development of other programs.

Qualitative research was applied, and will be presented through the facts that can be confirmed from different sources, conclusions that represent the activities of individuals derived from observation of a given situation and random engagement. The information presented through this article can be used as a basis for development of specific documents and rules regarding circular economy as an example for other public institutions in Bosnia and Herzegovina.

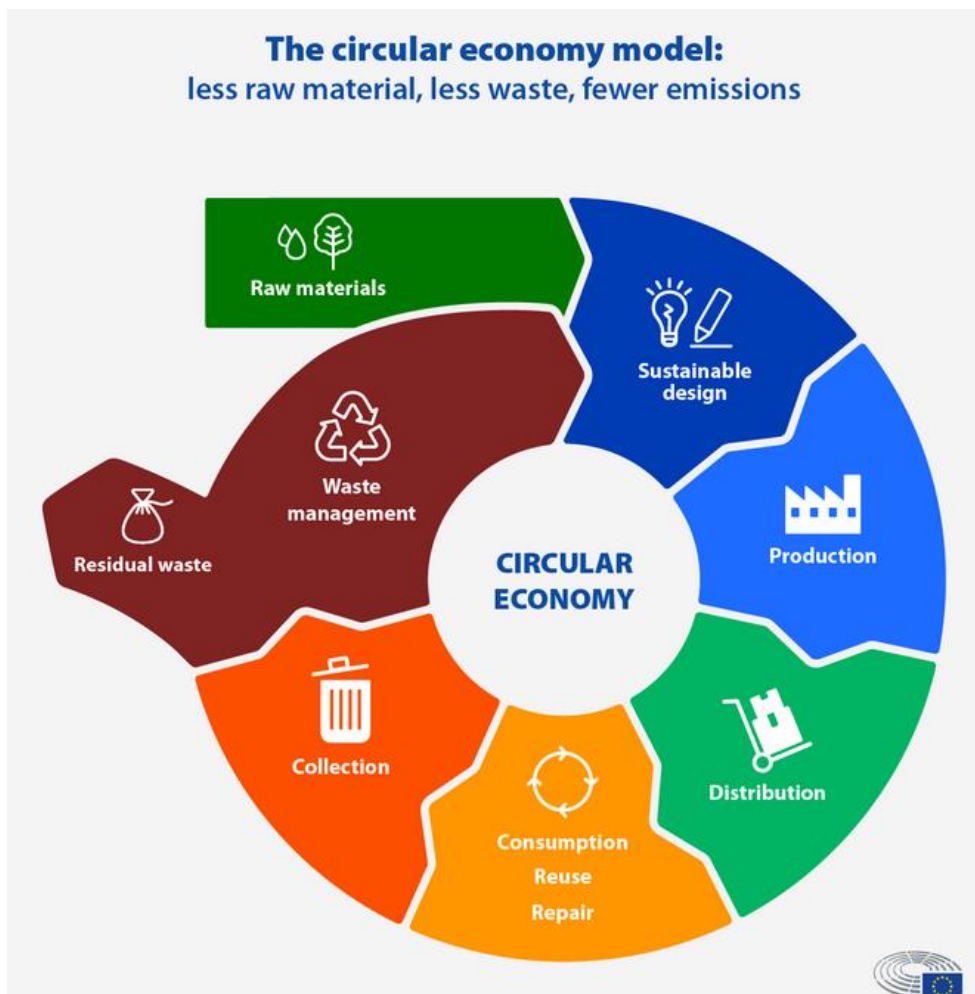
## **CIRCULAR ECONOMY**

The circular economy holds great significance for humanity. Its substantial potential lies in generating economic, social, environmental, and other values. The circular economy aims to achieve zero waste and is based on the principles of taking, reducing, repairing, utilizing, recycling, and reusing. Many companies in Bosnia and Herzegovina have been implementing this concept for several years; some operate in local markets, while others serve international ones. However, there are no specific regulations or legislations dedicated to the circular economy, except for market regulations related to the export of products derived from circular economy practices.

Government institutions have adopted several documents and plans concerning the circular economy, but there remains significant potential for further development in this area in the future. Bosnia and Herzegovina faces many uncertainties, but as it moves closer toward the European Union, it must adopt numerous regulations and action plans on the circular economy, as this model represents a method of sustainable development worldwide.

This model can be realized starting from the planning phase itself, including raw material collection, as illustrated in the following picture.



**Figure 1***The circular economy model*

Source:

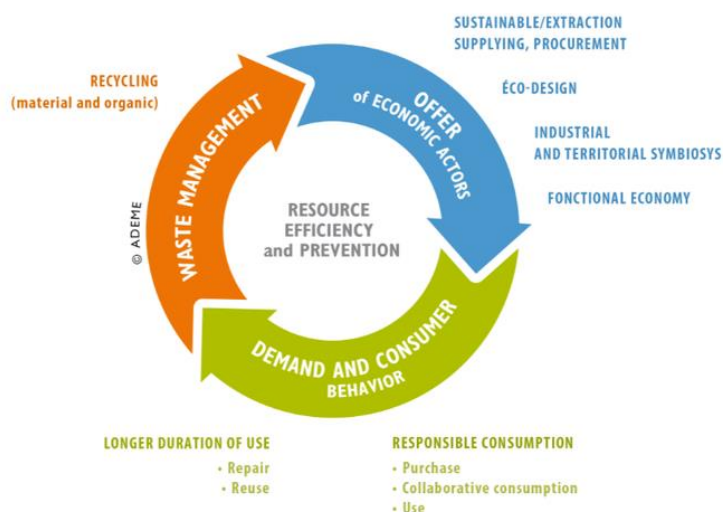
[https://www.europarl.europa.eu/resources/library/images/20230927PHT05951/20230927PHT05951\\_original.png](https://www.europarl.europa.eu/resources/library/images/20230927PHT05951/20230927PHT05951_original.png)

The picture illustrates how the circular economy contributes to the creation of a sustainable model through the reduction of raw materials, waste, greenhouse gas emissions, and similar factors. The European Union emphasizes that less waste results in more value across all aspects of life. By improving waste policies to support waste prevention and circularity, we can establish a well-developed sustainability framework. This model was adopted by the European Union as an action plan in 2020. Therefore, Bosnia and Herzegovina, as well as the countries of the Western Balkans, should adopt action plans for waste management and circularity to enhance the development policies of their countries.

## SYSTEMATICAL APPROACH

A systemic approach to the circular economy initially involves the creation of legal regulations, programs, and action plans at the level of state institutions. One of the key challenges for Bosnia and Herzegovina is the development of legislation and methodologies that regulate the circular economy. The basic version of the circular economy methods starts with the 3Rs and 7 pillars, as illustrated in the following image:

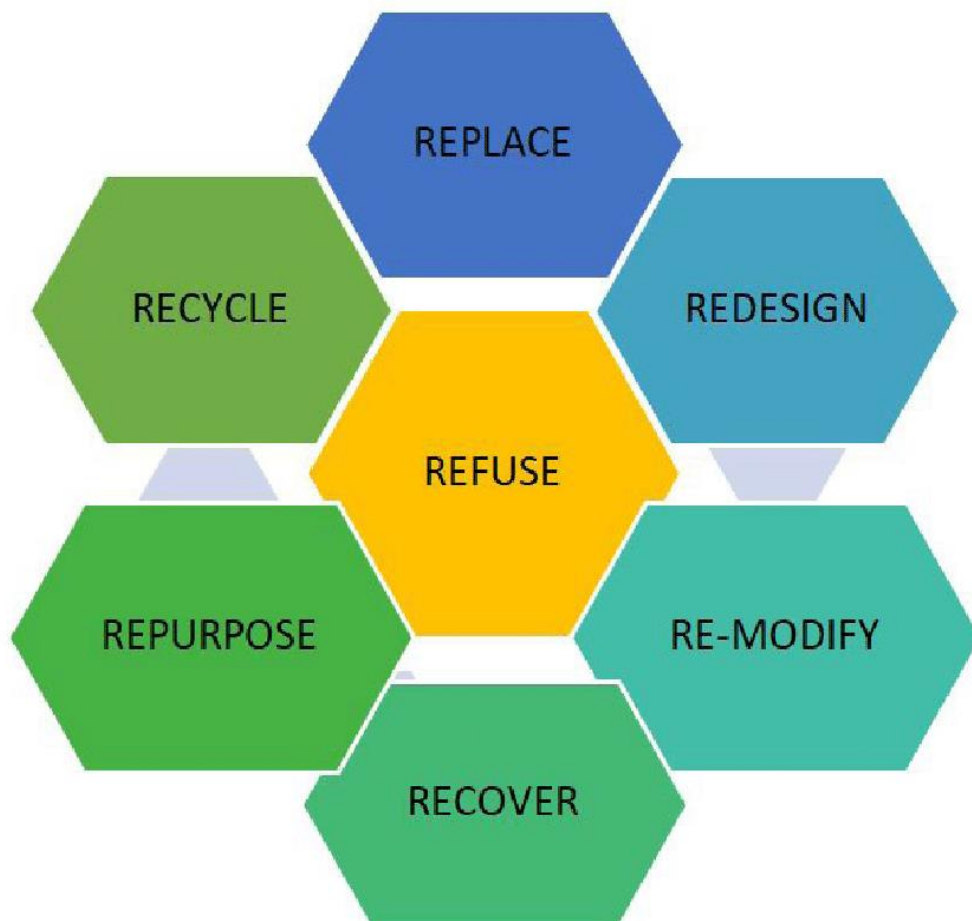
**Figure 2**  
*The 3R-7 pillars*



Source: [https://www.researchgate.net/figure/Circular-economy-according-to-the-scheme-proposed-by-Ademe-4\\_fig1\\_344043150](https://www.researchgate.net/figure/Circular-economy-according-to-the-scheme-proposed-by-Ademe-4_fig1_344043150)

The picture illustrates that the circular economy represents much more than the 3R concept; it is connected to many pillars related to different areas such as waste management, business, green economy, and similar fields.

Due to the comprehensive nature of the circular economy, many authors accept the 7R model, as illustrated in the following image:

**Figure 2***7Rs Circular Economy model*

Source: <https://www.researchgate.net/profile/Shaili-Vadera/publication/352994413/figure/fig5/AS:1042436042272770@1625547528355/Rs-Circular-Economy-Model.png>

According to author Vaderi, this concept is based on an integrated approach consisting of seven components: Replace, Redesign, Re-modify, Recover, Repurpose, Recycle, and Refuse.

The foundation of this 7R model is based on sustainable development and environmental conservation. Considering that research has confirmed the existence of a vast amount of plastic and other waste materials on Earth, this concept, or model, is applicable and recommended to be integrated into the product life cycle in order to reduce the harmful impact on the environment.

At the end, we can conclude that a systemic approach is employed in the circular economy to integrate the connected pillars into a cohesive whole, illustrating the

methods and principles of the circular economy based on established laws and practices, and linking the interrelated areas of action in natural and social processes.

## **FOOD WASTE IN THE CITY OF SARAJEVO**

The City of Sarajevo and the City Service for Sustainable Development represent a positive example of adopting a plan in the field of circular economy and implementing projects at both local and international levels. In this regard, the City of Sarajevo has adopted a plan for the prevention and reduction of waste and food losses until 2026.

According to the research cited in the Plan, it is shown that approximately 500 tons of food waste end up in landfills daily in Bosnia and Herzegovina. Based on the research, it was concluded that more than 12% of the daily waste disposed of in the Canton of Sarajevo consists of food waste. On the other hand, more than 20% of the population in Bosnia and Herzegovina live at or below the absolute poverty line. Therefore, food waste deserves a high level of priority. In this regard, the City of Sarajevo's plan proposes solutions that help reduce food waste and suggests synergy with all stakeholders who can contribute to addressing this significant issue.

Furthermore, based on estimates, the following is highlighted for Sarajevo Canton:

Estimate for the current situation (based on limited available data):

- Daily food waste generation in Sarajevo Canton is between 50 and 63 tons (equivalent to 18,250 - 22,995 tons per year)

Calculation:

- $438,443$  (population of Sarajevo Canton)  $\times$   $0.00089$  tons per capita per day of waste in BiH =  $390.21$  tons  $\times$   $0.15$  (average percentage of food waste in municipal waste in Sarajevo, various data sources) =  $59$  tons of food waste per day (equivalent to  $21,535$  tons per year)

Target estimate for food waste reduction by 2030:

- $29.5$  tons of food waste per day (equivalent to  $10,768$  tons per year).

Based on available information, an even greater amount of food waste is generated by food production companies. Therefore, the City of Sarajevo has initiated a food donation project for individuals in need, as well as a project like the Sarajevo Food Lab – a space where solutions are developed to prevent food waste generation, rescue surplus food, and recycle existing food waste to create new value.

It is also necessary to underline that the City of Sarajevo's plan includes the establishment of a Food Bank through the design of mobile applications to connect and inform people about food donation and collection.

This is just one example of the projects that the City of Sarajevo is implementing, alongside many others, encouraging young people to engage in food waste and circular economy activities, as well as businesses and individuals by sponsoring projects in these fields. To achieve positive results, they have established measures and activities, including but not limited to:

- Redirecting surplus food generated across all sectors of the food supply chain to people in need;

- Promoting a food waste prevention plan among all actors within the food supply chain by educating them about the problem and measures, and motivating their participation;
- Mapping all food waste generators and flows to identify potential surplus food donors, as well as mapping potential recipient organizations and charities willing to accept and redistribute donated surplus food;
- Establishment of a Food Bank.

In this context, one of the successful projects implemented under these measures is called 'Tanjir Više' (One More Plate). Tanjir Više is a civic initiative founded in Sarajevo with the goal of delivering surplus food from large events (such as weddings, birthdays, iftars, celebrations) to families in need. The operation works by citizens reporting surplus food via the Tanjir Više Facebook page, while volunteers, coordinated through a Viber group, collect the donated food within 30 minutes and deliver it to families in need. Currently, over 100 families receive food through this initiative

However, despite these advantages, it is necessary to emphasize that with the implementation of many projects in Sarajevo and beyond, there are challenges that require the specific adoption of regulations and measures in order to overcome these challenges.

## **A DIGITAL PLATFORM ENHANCING COLLABORATION IN THE CITY OF SARAJEVO**

The City of Sarajevo, through all aspects of its operations and organization, strives to improve its performance both among its employees and by enhancing collaboration with citizens. In this way, the digital platform Decidim was established.

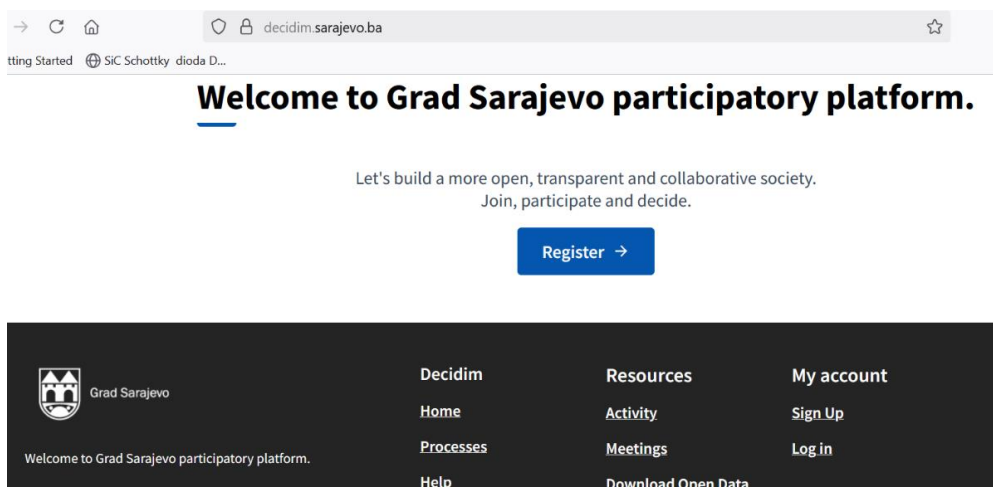
The goal of this platform was to create an efficient digital tool for democratic and active citizen participation in decision-making regarding activities, projects, voting on various initiatives, ideas, and similar matters. In recent years, the City of Sarajevo has also used this platform for citizen voting on the best food waste initiatives.

Decidim is a tailored digital solution designed to address the specific challenges faced by the citizens of Sarajevo. By creating this platform, the City of Sarajevo has enabled improved conditions for service delivery through Decidim—allowing the use of citizen feedback and the co-creation of important projects, ensuring that public services are designed to better meet user needs. This leads to enhanced service delivery, greater responsiveness, and higher satisfaction with the services provided by the City of Sarajevo.

Another benefit of Decidim is that it facilitates increased citizen participation. Decidim's citizen-centered approach has encouraged greater and more active involvement of citizens in decision-making processes in Sarajevo. By fostering better social cohesion, transparency, and equity, this digital platform has ultimately enabled a more responsible, fair, and improved relationship between citizens and the public administration of the City of Sarajevo.

This is a positive example that contributes to strengthening participatory democracy by enabling effective citizen participation in monitoring and decision-making on topics and projects that are important both to them and to the circular economy in general.

**Figure 3**  
*DECIDIM*



Source: <https://decidim.sarajevo.ba/>

## CONCLUSION

The impact of the circular economy is evident in every country, including the City of Sarajevo. Examples of good practice in this city can serve as a model for other Balkan countries to improve the implementation of circular economy projects. Moreover, necessary measures to be implemented in every public institution include the development of legal documents in the field of circular economy and specific related areas, starting with environmental protection, food waste reduction, and similar domains.

The City of Sarajevo has demonstrated through positive examples that its activities have substantial significance for citizens at the local level and beyond. The projects they implement contribute to environmental sustainability and address considerations of food waste residues. Within the Decidim online platform, ideas can be conceptualized, innovations promoted, and participatory democracy included. What is necessary is better collaboration among all government institutions in the City of Sarajevo regarding the advancement of circular economy measures and food waste management. It is anticipated that by 2030, this collaboration will be strengthened in line with the planned timeline to align with the principles of the circular economy and comply with EU standards.

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## BUSINESS STARTUP AND MOBILIZATION OF FOUNDING CAPITAL THROUGH ISLAMIC FINANCE

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### Abstract

This paper examines the key financing options available for business startups, with a particular emphasis on the mobilization of founding capital through alternative financial models and their alignment with Islamic finance principles. It explores both traditional sources of financing—such as self-financing, bank loans, and government incentives—and alternative mechanisms including venture capital, angel investing, and crowdfunding. The analysis highlights the structural limitations of conventional debt-based financing for early-stage ventures, especially in contexts characterized by high uncertainty, information asymmetry, and limited collateral. Special attention is given to alternative financing models that rely on equity participation and risk-sharing, demonstrating their conceptual and practical compatibility with Islamic finance instruments such as *mudarabah* and *musharakah*. By linking returns to real economic activity and shared business outcomes, these models offer ethically grounded and economically viable solutions for startup financing without reliance on interest-based debt. The paper argues that, when appropriately structured, venture capital, angel investments, and crowdfunding can serve as effective Shariah-compliant mechanisms for capital mobilization, fostering innovation, financial inclusion, and sustainable entrepreneurial growth. The findings contribute to the broader discourse on integrating modern financial practices with Islamic finance frameworks to support startup development and long-term economic resilience.

**Keywords:** Islamic finance; startup financing; capital mobilization; venture capital; angel investors; crowdfunding; *mudarabah*; *musharakah*; alternative finance; entrepreneurship

### INTRODUCTION

Launching a business requires substantial mobilization of financial resources, which often represents one of the main challenges for entrepreneurs, particularly in the early stages of company development. The choice of financing sources has far-reaching implications for the sustainability, growth dynamics, and long-term viability of an entrepreneurial venture. Different financing methods become relevant depending on the specific needs, structure, and capacities of the enterprise. As evidenced by numerous studies, access to capital is influenced not only by the broader economic environment, but also by the internal characteristics of the firm and its stage of development (Čalopa, Horvat, & Lalić, 2014).

According to the theoretical framework known as the enterprise life-cycle paradigm, financing sources vary significantly across different phases of a company's



development. In the early stages, when business risk is high and uncertainty dominates, entrepreneurs predominantly rely on internal sources of finance, such as personal savings or financial support from family and friends. As the firm matures and establishes a viable business model, opportunities for external financing gradually emerge, including business angels, venture capital funds, and eventually access to public capital markets.

Financing innovative startups presents a particular challenge, as these firms are often based on intangible assets and face high development costs, as well as pronounced information asymmetries between founders and potential investors. These characteristics significantly limit access to traditional financing instruments, such as bank loans, and increase the importance of alternative capital-raising mechanisms, including crowdfunding and crowd investing platforms. Empirical studies indicate that such approaches are effective not only in securing financial resources, but also in fostering social engagement and testing market demand for new products and services. At the very beginning of their operations, startups rarely qualify for bank financing due to the absence of financial statements and operating history, which further reinforces the need for alternative forms of capital mobilization (Anikin & Patlasov, 2022).

At the global level, research suggests that the degree of economic development of a country plays a crucial role in determining the choice of financing sources. While developed economies offer a broad range of financial instruments, including sophisticated venture capital funds and IPO mechanisms, entrepreneurs in developing economies, such as the Republic of Serbia, tend to rely more heavily on informal sources of capital and innovative strategies such as bootstrapping. Although these strategies help reduce financial risk, they may simultaneously constrain the speed and scale of business growth (Čalopa, Horvat, & Lalić, 2014).

According to Maurya (2012), startup companies typically pass through three main phases during their life cycle. The first phase is the Problem/Solution Fit, which focuses on identifying whether a real market problem exists and whether there is actual demand for a solution. At this stage, the idea itself is not the most critical element—it can be relatively simple and inexpensive—while implementation may require significant resources. The primary objective is to align the proposed solution with the identified problem and determine whether customers are willing to pay for it, as well as whether the problem is realistically solvable.

The second phase, Product/Market Fit, aims to assess whether the developed product truly meets market needs. Following the initial validation, this stage involves market analysis, feasibility studies, and the use of various performance metrics to evaluate the startup's potential for market penetration and sustained demand. The third phase is Scale, which involves business expansion, including workforce growth, market share acquisition, and revenue increase. The optimal moment for mobilizing founding capital is typically after the second phase, once the market has been tested and the startup has demonstrated credible growth potential. At this stage, startup founders and potential investors share a common objective—scaling and further development of the business.

## **FINANCING BUSINESS STARTUPS FROM OWN RESOURCES**

As stated in the introductory part of this chapter, financing business startups from own resources is a particularly common practice in developing and transition economies. Financing a business launch through internal resources—widely known as bootstrapping—represents a strategy in which entrepreneurs rely exclusively on their own financial means to establish and develop their companies. This typically includes personal savings, reinvestment of early revenues, and in some cases the sale of personal assets in order to secure the capital required to initiate business activities (Nkwinika, 2023).

Bootstrapping is often regarded as a core expression of the entrepreneurial spirit, as it requires a high level of creativity, financial discipline, and strategic thinking from founders. One of its primary advantages lies in the preservation of full ownership and control over the business. Without the involvement of external investors, entrepreneurs retain complete decision-making authority and are able to adjust their strategies swiftly in response to market changes. This autonomy enables faster and more flexible decision-making, which is particularly important in the early stages of business development, when entrepreneurs frequently encounter skepticism, resistance, and limited understanding of their ideas (Pal, Sethi, Jena, Patra, & Pal, 2020).

Another significant advantage of self-financing is the avoidance of debt-related costs, such as interest expenses associated with bank loans. Even in cases of favorable or informal borrowing, entrepreneurs face the psychological and financial pressure of debt obligations, which can be especially burdensome in the early stages, when focus should remain on refining the business idea and developing operations rather than servicing liabilities. Moreover, bootstrapping encourages prudent and rational resource management. Entrepreneurs tend to be more cautious when investing their own funds, which often leads to cost optimization and improved operational efficiency. This approach may also enhance the confidence of future investors, as it demonstrates the founders' ability to achieve tangible results with limited resources. In addition, it allows entrepreneurs to preserve borrowing capacity for later stages of development, when external financing may be more appropriate to support expansion and long-term growth (Barringer, 2008).

Despite its numerous advantages, financing from own resources also involves considerable risks. One of the most significant challenges is limited access to capital, which can slow down growth and weaken the firm's competitive position relative to businesses with access to external financing. This constraint is particularly pronounced in capital-intensive industries, such as technology or manufacturing, whereas bootstrapping is more easily applied in service-oriented sectors. Furthermore, entrepreneurs bear the entire financial risk personally, which may result in serious personal financial difficulties if the business fails. Founders often invest a substantial portion of their personal wealth, including savings, private property, or even retirement funds, which can have long-term financial consequences (Nkwinika, 2023).

In addition, resource constraints may limit a startup's ability to respond rapidly to market changes or to invest in the development of new products and technologies.

This can reduce competitiveness and make it more difficult to attract customers during the initial stages of operation.

One of the key factors influencing the successful launch of a business financed through own capital is the presence of a supportive economic and financial environment, combined with the application of strategies that enable optimal use of available resources. Wasserman (2015) emphasizes that the initial stage of business development requires careful alignment between identified market problems and proposed solutions, with market and competitive analysis playing a decisive role. Although such analyses generally do not require substantial financial investment, they provide essential insights into the realistic potential, risks, and feasibility of a business idea.

Reducing initial costs has proven to be a crucial factor, with priority given to core business activities that enable the straightforward delivery of products or services to the market. Practical solutions, such as operating from a home office or possessing adequate knowledge of legal and accounting procedures, can significantly reduce early-stage expenses. Additionally, securing a stable cash flow by offering products or services that generate revenue from the outset contributes to financial sustainability and facilitates further business development without heavy reliance on external capital sources. Organic business growth through the reinvestment of profits represents another important mechanism that reduces dependence on external financing while supporting sustainable and gradual expansion.

In this context, the use of free digital tools and resources, particularly those based on artificial intelligence, enhances operational efficiency and lowers operating costs. Finally, the development of strategic partnerships and professional networks has proven to be a valuable practice that can facilitate business launch and growth by enabling resource sharing and cost reduction.

Taken together, these factors form the foundation for the successful mobilization of own capital in launching and developing entrepreneurial ventures, highlighting the importance of well-planned and strategically implemented actions. Financing business startups from own resources represents a demanding but highly significant approach for entrepreneurs who seek to maintain control over their businesses and minimize reliance on external capital. Although it involves certain risks and limitations, this method allows entrepreneurs to establish strong foundations through careful planning, efficient resource management, and innovative practices. This approach is most commonly chosen by individuals who possess personal savings or are willing to liquidate personal assets, and who initiate businesses in service sectors that do not require substantial initial investments (Barringer, 2008). The empirical research conducted within this dissertation further indicates that a significant number of startups in Novi Pazar and the surrounding region rely primarily on own capital during their initial financing phase.

## **BANK LOANS AND GOVERNMENT INCENTIVES**

Traditional sources of capital, such as bank loans and government incentives, play an important role in supporting entrepreneurial initiatives; however, they are often accompanied by requirements that significantly limit their accessibility. Bank loans,

although traditionally considered a cornerstone of external financing, typically require substantial collateral and a solid financial track record—conditions that most startups are unable to meet. These constraints are particularly pronounced in regions such as Novi Pazar, where opportunities for capital mobilization are further restricted by the absence of a well-developed entrepreneurial support infrastructure, as well as by religiously motivated reservations toward conventional interest-based bank financing. This situation highlights a systemic need for innovation within the banking sector, aimed at tailoring credit products to the specific needs of local entrepreneurs. Evidence from developed economies suggests that guarantee funds and specialized startup programs can significantly reduce risk exposure for banks, thereby facilitating access to credit for high-risk but high-potential entrepreneurial ventures (Bajramović, Zogić, & Meta, 2023).

On the other hand, government incentives, such as subsidies and guarantee schemes, have the potential to substantially ease access to capital and stimulate entrepreneurial activity. Nevertheless, the effectiveness of these instruments largely depends on the quality of their implementation and their alignment with the needs of the local economy. In developed countries such as Germany and France, state-sponsored subsidy models and guarantee programs have proven to be effective mechanisms for supporting startups, increasing their survival rates and reducing the overall cost of capital (Lelarge, Sraer, & Thesmar, 2010).

For decades, bank loans have represented the primary source of external financing for firms worldwide. As a structured and relatively reliable mechanism for capital mobilization, loans enable companies to expand operations, invest in product and technological development, and improve infrastructure. However, despite their importance for established firms, bank loans often remain inaccessible to startups due to challenges inherent to early-stage businesses. One of the main barriers lies in the lack of collateral and business history, which makes banks cautious when extending credit. Excessive indebtedness can negatively affect firm growth and stability, increasing vulnerability to market fluctuations. This is particularly evident in high-risk sectors such as startups, where banks commonly impose stringent collateral requirements. At the same time, firms that use credit moderately, supported by proper diversification and risk management, may experience accelerated growth, provided they secure stable revenue streams for debt servicing (Ando, Matsumoto, & Matsumoto, 2017).

Information asymmetry and the absence of reliable historical data regarding startup performance further complicate access to bank financing. Banks often lack sufficient resources to adequately assess the risks associated with small and newly established firms, resulting in stricter lending conditions and higher collateral demands. Consequently, many startup entrepreneurs avoid bank borrowing altogether and instead rely on personal savings or financial support from family members (Blumberg & Letterie, 2008). An additional challenge stems from the psychological perception of the banking system among entrepreneurs in less economically developed regions. Limited trust in institutions, combined with low levels of financial literacy, frequently discourages entrepreneurs from applying for bank loans, even when they meet basic eligibility criteria. This underscores the

importance of education and increased transparency in banking services in order to remove barriers to capital mobilization.

In the specific context of Novi Pazar, there is a clear need to integrate innovative financial models that can compensate for the shortcomings of traditional bank lending. Islamic finance instruments, such as murabaha and partnership-based financing, represent viable alternatives that are compatible with local cultural and religious preferences. These models not only reduce debt-related pressure but also provide a more transparent and ethically grounded framework for capital mobilization (Bajramović, Zogić, & Meta, 2023).

Government incentives, including subsidies, guarantee funds, and tax relief measures, constitute a key instrument for reducing financial barriers faced by entrepreneurs in the early stages of business development. Their role in strengthening entrepreneurial ecosystems and fostering economic growth has been confirmed in numerous economies worldwide, where targeted state interventions have significantly enhanced startup capacity and success potential. Empirical evidence suggests that startups benefiting from government subsidies are less dependent on personal capital and experience lower financial pressure, enabling them to focus more effectively on growth and innovation.

The French ACCRE program (*Aide aux Chômeurs Créateurs ou Repreneurs d'Entreprises*) serves as a notable example of successful state support for entrepreneurship. Subsidies provided through this program reduce fixed operating costs and offer financial security during the critical initial years of business activity. This allows entrepreneurs to allocate resources toward business development and market research, thereby reducing the risk of failure. The combination of subsidies and credit guarantees facilitates more efficient risk-sharing between the state and financial institutions, creating more favourable lending conditions for startups. Moreover, subsidies function not only as direct financial assistance but also as a mechanism for improving entrepreneurs' creditworthiness, thereby reducing reliance on family resources or informal capital sources (Crepon & Duguet, 2003).

Beyond their financial impact, government subsidies also have a broader socio-economic dimension. They contribute to job creation, stimulate economic activity, and reduce the prevalence of informal business practices. Examples from Germany and Canada demonstrate that state-supported entrepreneurial policies have significantly strengthened local economies by increasing employment rates and contributing to GDP growth. However, the effectiveness of such programs largely depends on their adaptation to the specific characteristics of local communities (Čalopa, Horvat, & Lalić, 2014).

In Novi Pazar, where a majority of the population prefers Islamic financial models, subsidies and incentive schemes can be combined with Islamic finance principles to ensure broader acceptance and greater effectiveness. In conclusion, government incentives represent an essential catalyst for entrepreneurial development, particularly in resource-constrained economies such as Novi Pazar. Through carefully designed programs and integration with contemporary financial models, these measures can substantially enhance the local entrepreneurial ecosystem, reduce inequalities, and create a sustainable foundation for economic development. Research indicates that the combined use of bank loans and government subsidies

can generate a strong multiplier effect on entrepreneurial growth. While subsidies lower the cost of capital and enable investment in expansion, bank loans provide the liquidity necessary for operational needs. Evidence from France and Germany shows that such hybrid support models increase startup survival rates during the first three years of operation and significantly reduce insolvency risks (Crepon & Duguet, 2003).

## **ALIGNMENT OF ALTERNATIVE CAPITAL MOBILIZATION MODELS WITH ISLAMIC FINANCE**

Alternative capital mobilization models, such as venture capital, angel investing, and crowdfunding, are conceptually close to Islamic finance because they are largely built on risk-sharing and profit participation, rather than on guaranteed, interest-based returns. In Islamic finance, capital should be linked to real economic activity, and returns are generally justified when the investor accepts business risk. For that reason, many “modern” alternative finance tools can be structured in a Shariah-compliant way when they avoid fixed interest, excessive uncertainty, and prohibited business sectors (Lin, 2022).

Venture capital (VC) is particularly compatible with Islamic partnership structures because it typically involves investing in exchange for equity ownership and generating returns through the company’s growth and eventual exit (rather than through predetermined interest payments). This resembles *musharakah* (active partnership), where partners contribute capital (and sometimes expertise), share profits according to agreed ratios, and bear losses in proportion to their capital contribution. VC investors also often provide strategic guidance and governance support, which aligns well with the idea of an “active partner” contributing beyond money.

Angel investment often resembles *mudharabah* (silent/passive partnership) in its basic logic: the investor provides capital while the entrepreneur provides management, effort, and execution. In a classical *mudharabah* arrangement, profits are shared according to a pre-agreed ratio, while financial losses are borne by the capital provider (unless caused by negligence or misconduct by the manager). In practice, many angel deals can be structured similarly, especially when returns are performance-based and tied to business outcomes, rather than fixed repayments. Where angels take equity, the structure can also resemble *musharakah*, depending on the level of involvement and governance rights (Habibur, 2018).

Crowdfunding, especially equity-based models, can also be aligned with Islamic finance principles because it allows a broad group of investors to fund a project or company and receive returns based on actual performance. Shariah-compliant crowdfunding frameworks typically use partnership-based structures (*mudharabah* or *musharakah*) or asset-backed structures, ensuring that returns reflect real value creation rather than guaranteed interest. An additional advantage of crowdfunding is transparency: platforms can disclose use of funds, milestones, and reporting standards, which supports ethical finance objectives (Hadžić, 2014).

For these models to be genuinely Shariah-compliant, the key requirement is not the “label” (VC, angel, crowdfunding), but the contract structure and the rules of return.

In practical terms, this means: avoiding interest-based lending, ensuring clear terms on profit-and-loss sharing, defining investor rights and governance clearly, minimizing excessive ambiguity, and screening investments to ensure they do not involve prohibited activities (Habibur, 2018).

Overall, although venture capital, angel investing, and crowdfunding developed within conventional financial systems, their equity-based and performance-linked structures make them naturally adaptable to Islamic finance. With proper contractual design and compliance screening, these models can become credible Shariah-aligned mechanisms for mobilizing capital, especially in communities where entrepreneurs seek growth financing without conventional debt (Hadžić, 2014).

## CONCLUSION

This chapter has examined the key sources and models of financing available for business startups, with a particular focus on alternative mechanisms for capital mobilization and their compatibility with Islamic finance principles. The analysis demonstrates that access to capital remains one of the most critical challenges for entrepreneurs, especially in early-stage ventures and in environments with limited financial infrastructure. Traditional financing instruments, such as bank loans and state incentives, continue to play an important role, but their accessibility is often constrained by strict requirements, administrative complexity, and, in some cases, cultural or religious considerations.

Alternative financial models, including venture capital, angel investing, and crowdfunding, have emerged as increasingly important tools for addressing these limitations. Beyond providing financial resources, these models offer additional value through mentorship, strategic guidance, knowledge transfer, and access to professional networks. By emphasizing equity participation and shared risk, alternative financing mechanisms reduce the pressure of fixed debt obligations and allow startups to focus on innovation, market validation, and sustainable growth.

A key contribution of this chapter lies in demonstrating that many alternative financing models are conceptually aligned with Islamic finance principles. Their reliance on profit-and-loss sharing, ownership participation, and linkage to real economic activity makes them naturally adaptable to Shariah-compliant structures such as *mudarabah* and *musharakah*. With appropriate contractual design, transparency, and ethical screening, venture capital, angel investments, and crowdfunding can function as viable Islamic finance instruments, offering entrepreneurs access to capital without reliance on interest-based debt.

Overall, the integration of alternative financing models with Islamic finance principles presents a meaningful opportunity for strengthening entrepreneurial ecosystems, enhancing financial inclusion, and mobilizing private capital in a manner that is both economically efficient and ethically grounded. A diversified financing framework, combining traditional instruments, alternative models, and Islamic finance principles, can contribute to a more resilient, inclusive, and sustainable foundation for startup development and long-term economic growth.



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## HALAL MARKETING AND BRANDING IN NON-OIC COUNTRIES: THE CASE OF CROATIA

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### Abstract

Every day the halal industry is prospering on the global scale with its continuous evolution. The term marketing denotes market activity, working with the market, placing products and services on the market. One of the goals of marketing and branding is to attract and retain loyal customers by offering a product that is always in line with the promises that the brand makes. The main issue that arises when marketing and branding products on the halal market is whether anyone's beliefs in this case religion should be followed? It is generally accepted to apply the rules of ethics. Some of the challenges which halal producers are facing on the market are: geopolitical situation, non-harmonized halal standards, accreditation and certification, islamophobia, self-declaration of halal etc.

So some of the questions that are arising to every manager and marketing manager in non-OIC countries are: What are the differences between marketing and halal marketing? Do we need to generally label all products with halal logo or simply used it only for export to global halal market? Do we need to have specialized marketing campaign for halal market? How to brand our products? This paper analyses those and other questions and challenges of halal marketing and branding in non-OIC countries. The method conducted is research (survey) with halal certified holders.

**Keywords:** halal, marketing, branding, non-OIC countries, challenges

### INTRODUCTION

Every company aims to offer quality products and services, establish itself as a serious and reliable partner, and generate revenue to enable further development. The challenges in the market are numerous, and one of the greatest is finding and retaining customers. The growing importance of halal products and services in nearly all global economies has led to the development of halal marketing and branding, which poses a particular challenge in non-OIC countries. According to the latest census (2021), there are 50,981 Muslims living in Croatia. Although a minority, Muslims have been granted full freedom to practice their religion since April 27, 1916, when the Law on the Recognition of the Islamic Religion was adopted. This is further supported by the current legal framework—the Law on the Legal Status of Religious Communities (OG 83/02, 73/13) and the Agreement between the Government of the Republic of Croatia and the Islamic Community in Croatia on Issues of Common Interest. While a halal lifestyle has been practiced in



Croatia since the arrival of the first Muslim immigrants, formal halal regulation is a more recent development. The history of halal certification in Croatia dates back to 1991, when the Islamic Community began issuing certificates to companies interested in exporting meat to Muslim countries. These certificates were issued until the establishment of the Centre for Halal Quality Certification and the adoption of a systematic approach to halal certification, which included the registration of the halal standard with the Croatian Standards Institute (Dugonjić, 2019).

Currently, there are more than 4,000 halal-certified products available in Croatia, both domestic and international. However, halal red meat remains largely unavailable in supermarkets and butcher shops for reasons that have not yet been clearly identified. Despite the relatively small Muslim population in Croatia, the growing number of Muslim tourists and foreign workers suggests that the halal segment is being neglected. One of the key questions in marketing and branding halal products is whether it is appropriate to use a person's beliefs, in this case, religion, for commercial purposes. In general, it is accepted that ethical principles should guide such efforts.

This paper analyses the marketing and branding of halal-certified products and services in Croatia, with a focus on the challenges and opportunities present in a non-OIC country context.

## HALAL MARKETING

Literally translated, marketing means market activity, working with the market, and placing products or services on the market. Today, marketing is present everywhere, and every product or service requires a well-designed marketing strategy. The philosophy of marketing lies in identifying and fulfilling needs while ensuring customer satisfaction, benefiting both the company and the consumer. In this sense, marketing has existed and evolved for thousands of years (Zavišić, 2011).

The market is extremely dynamic and constantly evolving, especially in an era of increasing digitalization, where marketing must adapt almost daily. It is well known that the primary goal of marketing is to facilitate exchange between two or more parties. Staying ahead of the competition or at least keeping up with it remains one of the strongest motivators for innovation. Throughout history, this competitive drive has fuelled human creativity, leading to new ways of capturing the attention of potential customers. Religion, as a major cultural factor, undoubtedly has sociological implications for sales and marketing (Baldasare & Campo, 2015).

Religion influences the behaviour, values, and attitudes of believers, shaping their worldview and defining the meaning and purpose of life (Prevšić & Došen- Ozrečić, 1999).

Therefore, its impact is profound, arguably the most significant, in both the personal and professional lives of believers, and it must not be overlooked in sales and marketing activities. That is why the principles of halal are essential when doing business in the halal market. These principles include: the basic rule that all things are permissible unless proven otherwise; only God has the authority to declare something lawful or forbidden; certain prohibitions are linked to impurity or harm;

for every prohibited item, a lawful alternative exists; and necessity permits exceptions. All these principles guide business conduct in the halal context.

These same principles apply to the halal product certification process. Manufacturers seeking halal certification must ensure that all ingredients used in their products are halal-compliant. In this process, compromises, though common in the business world, are not acceptable. We are increasingly witnessing the use of the naked female body in marketing campaigns, especially in advertisements. These types of ads are particularly common in the promotion of cosmetic products. Even if the product itself is halal, it must not be advertised using such imagery if it is labelled or marketed as halal. Doing so would have a very negative and undesirable effect on the producer's credibility and reputation.

Therefore, halal marketing follows Islamic sources and the principles outlined above. For easier understanding, we can say it is guided by ethical principles, although ethics alone does not fully encompass all Islamic values. In halal marketing, we are guided by the goal of maximizing value while adhering to the principle of fairness and serving the broader social good (Fornažar-Agić, 2018).

## **HALAL BRANDING**

When we talk about a brand, we can say that its essence is actually emotion. It takes years for a company to build a brand. One of the biggest challenges in branding a product or service is competition and today's increasingly demanding consumers. In branding, the most important thing is to maintain consistency and continuous quality of products or services in order to attract and retain customers. The brand should always be in line with the promises it makes. A strong brand is connected not only with customers but also with employees, and it allows companies to be recognized more easily in the market. If a brand is strong and trusted, it is much easier to find new business partners and expand into new markets.

When we analyse what a brand means today, and how deeply people are connected to brands throughout their lives, we see that halal fully corresponds to all the key characteristics of modern brands and even goes beyond them. Halal implies added value and elevated quality of products and services. Halal-certified companies raise the level of their quality through the certification process, as they are subject to additional controls and more rigorous business practices. According to a survey conducted among halal certificate holders in Croatia, 85.2% of respondents agree that halal certification contributes to product quality (Dugonjić, 2019).

As halal is a comprehensive system of permissibility in Islam, branding based on halal principles can be applied across many sectors, including food, pharmaceuticals, cosmetics, fashion, tourism, education, and finance. In this way, halal becomes not just a religious standard but also a lifestyle brand that offers ethical assurance and consumer trust. Interestingly, according to Forbes' list of the world's 100 most valuable brands (Forbes, 2020) there is not a single brand originating from an OIC country. This is surprising, especially when we consider the historical contributions of the Islamic world during the Golden Age of Islam, a period that saw major advancements in architecture, philosophy, medicine,

astronomy, mathematics, and technology. This legacy shows that creativity, science, and commerce were once deeply intertwined in Muslim societies.

Today, halal branding has the potential to revive some of that legacy. It offers a platform where ethical values meet modern consumer expectations. Halal products can appeal not only to Muslim consumers but also to a broader audience that seeks clean, safe, transparent, and responsibly made goods. This opens the door to "ethical consumerism" that is growing globally. A clear and coherent halal brand strategy helps companies differentiate themselves in saturated markets. Consistent messaging, quality assurance, and alignment with religious and ethical values build long-term trust. However, it is essential that branding efforts remain authentic and not purely opportunistic. Consumers, especially younger generations, are quick to recognize when a brand lacks sincerity or merely exploits religious symbols for profit.

That is why halal branding must go hand in hand with proper education, not only for producers but also for consumers. Understanding what halal truly means and how it adds value encourages loyalty and long-term growth. With proper positioning, halal brands from non-OIC countries like Croatia could one day stand shoulder-to-shoulder with global giants, not just in niche markets but on the world stage. As with marketing, halal branding must follow the principles of Islam. This includes respecting modesty, honesty, social responsibility, and transparency. If done correctly, halal branding becomes a powerful tool, not just for commercial success, but also for promoting intercultural understanding, ethical business practices, and global inclusivity.

## **HALAL MARKETING AND BRANDING IN NON-OIC COUNTRIES**

### **CHALLENGES**

In many countries of the European Union and beyond, everything related to Islam often carries social and political connotations, which are mostly portrayed negatively in public discourse. Such perceptions have led to various approaches to halal practices, such as the requirement to stun animals before slaughter. As a result, halal slaughter has been banned in some countries, leading to a loss of consumer confidence and a negative perception of halal among non-Muslims. In the process of halal certification and standardization in European countries and beyond, several persistent problem areas can be identified:

- a) Islam as a religion is not officially recognized in most European countries. Only four EU countries have recognized Islam as an equal religion: Austria (1912), Croatia (1916), Belgium (1974), and Spain (1992).
- b) Lack of a unified Islamic community in Europe. Islamic communities across Europe are organized primarily along national lines, such as the Islamic Community of Bosniaks in Germany or the Turkish-Islamic Union for Religious Affairs (Türkisch-Islamische Union der Anstalt für Religion). This fragmentation presents a challenge in regulating the European halal market, as it remains unclear who represents legitimate Islamic authority and who is authorized to interpret Islamic regulations when drafting halal standards. Since

halal is primarily a matter of Islamic jurisprudence, any standard without the confirmation of an appropriate Islamic authority may lack credibility and trust among Muslim consumers.

- c) Unique vs. non-unique halal standards. Although SMIIC (Standards and Metrology Institute for Islamic Countries) has developed halal standards, such as OIC/SMIIC 1:2019 "General Requirements for Halal Food", and these have been adopted at the OIC level, many individual countries impose these same standards as their own national requirements. Some even require additional accreditations or certifications, which ultimately creates trade barriers.
- d) Anyone can establish a halal certification body. Numerous halal certification bodies have been founded by private individuals without recognized Islamic authority or credibility. As a result, certificates have sometimes been issued without proper procedures, even over the phone, which has led to cases where the halal logo appeared on products that, according to their declarations, contain pork. In these cases, the primary motivation was profit, not compliance with halal principles.
- e) Halal self-declaration. In an effort to attract Muslim customers, many businesses and restaurants display the word "halal" or a halal sign without possessing any official halal certification. Although they may meet all legal business requirements, the absence of regulatory frameworks for halal has allowed many to self-declare their products or services as halal, often misleading consumers.

To ensure the long-term regulation of the European halal market, the following steps are necessary: institutional recognition of Islam, international cooperation and unification of Islamic communities under an umbrella organization, and the development of a single, unified halal standard for food, certification, and accreditation, aligned with similar processes in OIC countries (Dugonjić, 2019).

All of the above challenges significantly influence management decisions regarding whether and how companies choose to enter and operate within the halal market.

## **HALAL FRIENDLY**

In an effort to create a recognizable and memorable visual identity tailored to both domestic and international markets, the Centre for Halal Quality Certification introduced the Croatia Halal Friendly brand. This label was developed not only for national branding but also to help promote Croatia as a welcoming destination for Muslim consumers and travellers. The brand serves as a tool to strengthen the visibility and competitiveness of Croatian products and services on the global market, especially in tourism and export sectors. A halal-friendly environment in Croatia is gradually taking shape. There is a growing number of certified producers, halal products are becoming more available on supermarket shelves, and more hotels, restaurants, and travel agencies are obtaining halal certification. Together, these efforts create a more inclusive and culturally sensitive atmosphere for both domestic consumers and international visitors (Dugonjić, 2019).

However, the halal-friendly concept shouldn't be limited to Muslim-majority countries or specific tourism segments. The principles behind halal, such as

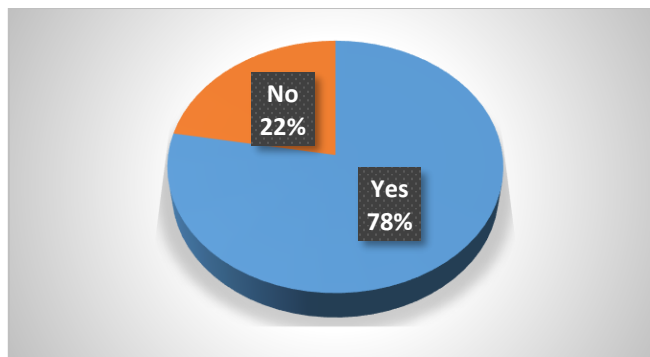
cleanliness, safety, ethical sourcing, transparency, and consumer respect, are universal and increasingly valued by people around the world, regardless of religious background. Today's consumers are more conscious than ever. Many seek products and services they can trust: those that are produced responsibly and uphold strong ethical standards. This is why halal-friendly practices have the potential to be applied globally. In fact, adopting such an approach can help businesses not only reach Muslim consumers but also appeal to a wider audience that values integrity, quality, and social responsibility. In short, going halal-friendly is not just about meeting religious requirements. It's about building trust, adding value, and opening doors to new markets by respecting diversity and focusing on high standards. This mindset can benefit businesses in any part of the world.

## RESEARCH RESULTS

The halal market is highly dynamic, and halal-certified manufacturers and marketing professionals face numerous challenges. To explore these challenges more deeply, research on halal marketing and branding was conducted using a survey method. The survey targeted halal certificate holders in Croatia and was carried out anonymously to ensure honest and credible responses.

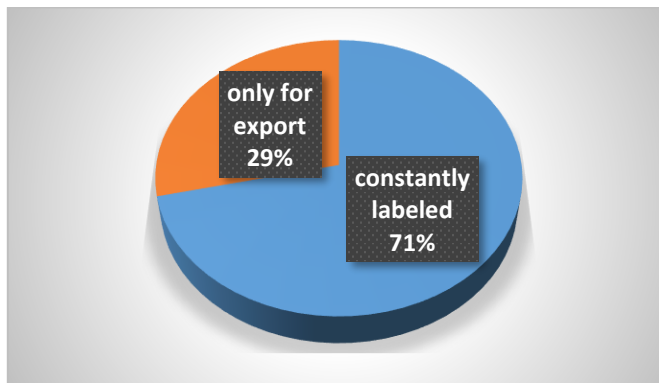
**Figure 1**

*Are halal-certified products marked with the halal quality logo?*



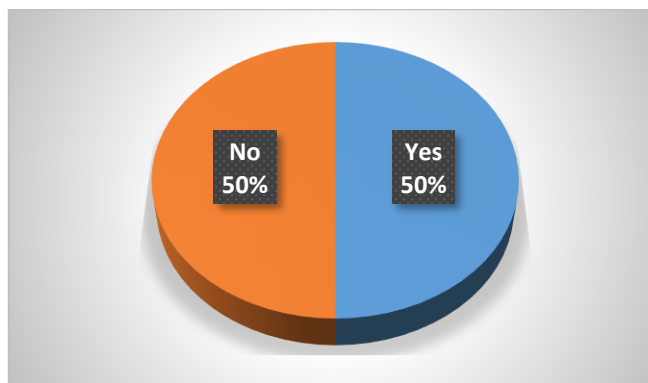
Source: Author's Data

As we know, labelling products with the halal quality logo is a direct way to communicate with customers seeking halal-compliant items. Therefore, the first question aimed to determine how many certified manufacturers label their products with the halal logo. The results show that 78% of respondents do label their products, while 22% do not. Possible reasons for not labelling include limited space on product packaging, exclusive presence on the domestic market, or growing concerns about Islamophobia. Although the majority of halal-certified manufacturers label their products, further research is needed to better understand the reasons behind those who do not.

**Figure 1a***When are products labeled?*

Source: Author's Data

The next question explored whether products are labeled with the halal logo continuously or only for export purposes. The results indicate that 71% of manufacturers consistently label their products, while 29% use the halal logo only for export. In addition to previously mentioned reasons, it is likely that some certified manufacturers produce halal products specifically for foreign markets.

**Figure 2***Have you developed specially tailored new products for the halal market?*

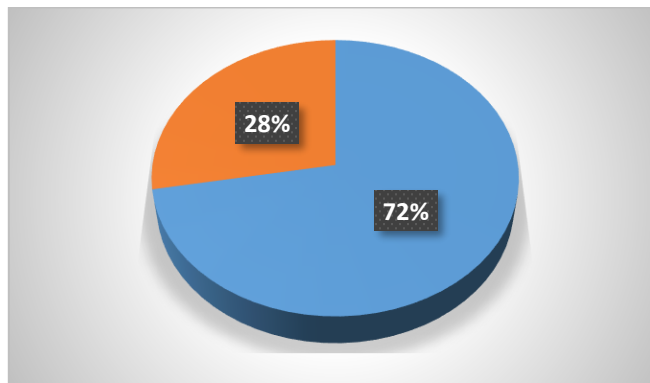
Source: Author's Data

Today, many producers adapt their products to meet market demands, including producing under different brand names. According to the survey results, 50% of halal-certified manufacturers have developed specially tailored products for the halal market, while the other half have not.



**Figure 3**

*Have you specifically branded halal products?*

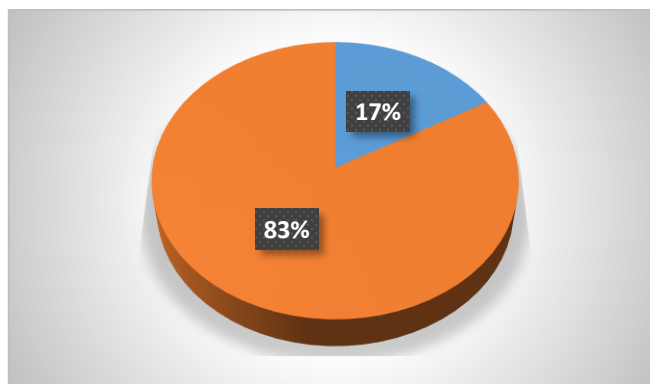


Source: Author's Data

Special branding of halal products has not been performed by 72% of respondents, while 28% reported that they had implemented specific branding strategies for their halal-certified products.

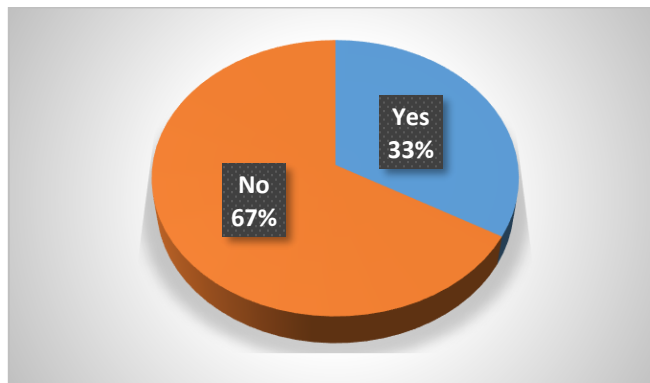
**Figure 4**

*Have you conducted a special halal product marketing campaign?*



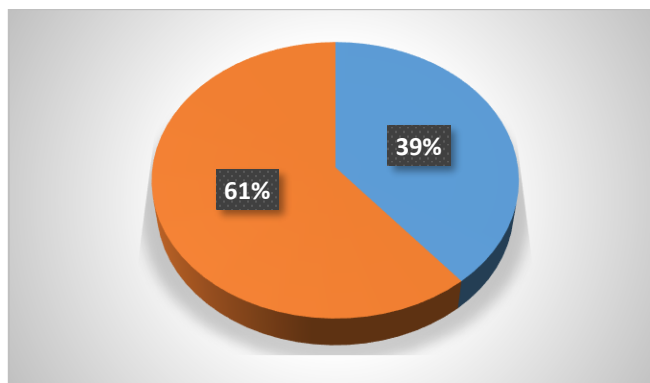
Source: Author's Data

Since halal products communicate directly with consumers and often carry added value, it is important to consider how they are promoted. Only 17% of respondents stated that they had conducted a dedicated halal marketing campaign. This result highlights the need for stronger marketing efforts in both domestic and international markets, especially given that marketing involves market activity, engagement, and strategic product placement.

**Figure 5***Have you participated in halal fairs?*

Source: Author's Data

Fairs offer excellent opportunities for companies to promote their products, connect with business partners, meet consumers, and understand competitors. Despite the growing number of halal fairs and conferences worldwide, 67% of surveyed companies have never participated in such events. This suggests the need for additional encouragement, support, and organization of joint industry appearances.

**Figure 6***Are you familiar with the concept of halal marketing?*

Source: Author's Data

Finally, the survey asked respondents about their awareness of the concept of halal marketing. The results showed that 61% of halal-certified manufacturers are not familiar with the concept, indicating a strong need for further education and capacity building in order to better position halal products in the market.

## CONCLUSIONS

Every religious prohibition or impermissible act has a purpose, and although the reasons behind some rules may not always be fully understood by believers, adherence is based on seeking God's pleasure. Therefore, approaching the halal market incorrectly, especially in terms of marketing and branding, can have unintended negative consequences. A thorough understanding of halal principles is essential for company management, and particularly for marketing and branding professionals, to ensure respectful and effective engagement with the market. Based on the survey results conducted in Croatia, several key conclusions can be drawn:

- a) There is a clear need to increase the labelling of halal-certified products with the halal quality logo in the domestic market, rather than focusing solely on export markets.
- b) Opportunities exist for the development of specially tailored products for the halal market, along with stronger branding efforts to increase consumer awareness and trust.
- c) Dedicated marketing campaigns for halal products are necessary, both domestically and internationally, to better communicate product values and to compete effectively.
- d) Participation in halal fairs and industry events should be encouraged, as these provide valuable platforms for networking, promotion, and learning.
- e) There is a significant gap in knowledge about halal marketing among halal-certified companies, highlighting the urgent need for targeted education and training programs.

Additionally, the halal market presents a unique blend of ethical considerations and business opportunities. Companies that truly respect halal principles can gain not only customer loyalty but also a competitive advantage in both Muslim and non-Muslim markets. Transparency, consistency, and cultural sensitivity are crucial for building brand trust in this sector. Furthermore, as globalization and digitalization continue to influence consumer behaviour, companies must adapt their marketing strategies accordingly. The rise of social media and online platforms provides halal-certified companies with new avenues to engage with their target audience, but it also demands a higher level of responsibility to maintain authenticity and avoid misleading claims.

Finally, the halal market is not just about food products, it spans cosmetics, pharmaceuticals, fashion, tourism, and education. This diversification offers great potential but requires a holistic understanding of halal standards across different sectors. In conclusion, to succeed in the growing halal market, businesses must combine sound knowledge of halal principles with strategic marketing and branding. Only through such an integrated approach can they meet the needs of Muslim consumers while respecting their values, ultimately contributing to sustainable business growth and cultural harmony.

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# THE IMPACT OF DIGITAL FORENSICS AND ARTIFICIAL INTELLIGENCE ON CITIZENS' SECURITY CULTURE: AN ETHICAL AND LEGAL ANALYSIS IN LIGHT OF ISLAMIC PRINCIPLES

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## Abstract

This paper analyzes the dual nature of contemporary technological advancements, primarily Information and Communication Technologies (ICT) and Artificial Intelligence (AI), and their impact on individual lives and global security. While technology drives civil and economic development, it simultaneously creates new domains for organized crime and cyber threats. Addressing this challenge, the paper posits that a proactive citizens' security culture serves as the first and most critical line of defense.

The primary objective is to define the elements of this security culture, emphasizing individual responsibility, risk awareness, and ethical practices. Uniquely, the study integrates Islamic concepts into this framework. Through the prism of the objectives of Sharia (*Maqasid al-Shari'ah*), the paper interprets the protection of intellect (safeguarding against disinformation) and property (preventing cyber fraud) as central religious and ethical obligations. Finally, the paper offers recommendations for integrating these ethical models into educational systems and media campaigns, aiming to increase citizen resilience and strengthen social cohesion against complex hybrid threats.

**Keywords:** Contemporary technologies, security culture, cyber threats, cybercrime, organized crime, digital security, Islam, Maqasid al-Shari'ah, privacy, ethics



## INTRODUCTION

The contemporary era is defined by the rapid evolution of Information and Communication Technologies (ICT), Artificial Intelligence (AI), the Internet of Things (IoT), and ubiquitous digitalization. These advancements have transformed the global economy, communication, and social life. While technological achievements offer substantial benefits regarding efficiency, accessibility, and prosperity, they also represent powerful tools for increasingly sophisticated actors, including organized crime groups and cyber attackers (Kshetri, 2013). The digital sphere has evolved into a new dimension where complex forms of criminality, including terrorism, drug trafficking, and human trafficking, are organized and financed (Martin & Romano, 1992).

The exponential growth of cybercrime and the complexity of organized crime in the digital domain (Lavorgna, 2016) generate a fundamental security rift: while states and institutions invest vast resources into cyber defense and investigative capacities, the individual often remains the critical vulnerability in the defense chain. Individual vulnerability, stemming from insufficient digital literacy, careless use of social networks (Kwiatek et al., 2021), and low risk awareness, directly contributes to the success of cyberattacks, identity theft, and the spread of disinformation.

Collective awareness regarding the protection of information assets is often low (Milanović & Radovanović, 2015), whereas effective security must be reflected in an individual's readiness to recognize danger and react according to acquired knowledge and ethical attitudes (NSA, 2024). Therefore, the focus must shift from exclusively institutional defense to strengthening security culture at the individual level.

The goal of this paper is to define and critically analyze the basic elements of security culture necessary for citizen resilience in the digital age. The central research thesis is that effective security culture requires not only technical knowledge but also a strong ethical and moral compass to guide digital behavior. Consequently, the paper introduces a complementary perspective, analyzing how Islamic ethical frameworks can contribute to the development of a responsible security culture. Using fundamental principles, specifically the objectives of Sharia (Maqasid al-Shari'ah) and the protection of five essential values (faith, life, intellect, property, and lineage)—the paper analyzes how this traditional ethical matrix operates within the digital domain (Auda, 2007; Mustapha & Malkan, 2025). The protection of intellect from disinformation and the protection of property from cyber fraud are viewed as direct religious and civic obligations (Ahmad et al., 2025), thereby strengthening individual awareness of the importance of ethical digital behavior.

DIGITAL CULTURE AND THE IMPERATIVE OF PROTECTION (HIFZ AL-MAL AND HIFZ AL-AQL)

Digital forensics is traditionally defined as a specialized field dealing with the identification, collection, analysis, preservation, and presentation of electronic evidence used in legal proceedings (Samardžić, 2005). This discipline is essential as criminal activities increasingly leave complex digital footprints in cases of computer crime, financial fraud, cyberattacks, or terrorist activities. However, in the context of security culture, key forensic principles are translated into personal ethical obligations, which align deeply with fundamental Islamic teachings, particularly the principles of *Maqasid al-Shari'ah*. Awareness of digital forensic techniques serves as an incentive for individuals to proactively prevent compromise.

ETHICAL TRANSPOSITION OF FORENSIC PRINCIPLES INTO SECURITY CULTURE

In the Islamic concept, the protection of the five essential values (daruriyat) establishes a moral and religious foundation for digital behaviour.

Table 1  
*Alignment of Forensic and Islamic Ethical Principles*

Physical (Forensic) Principle	Ethical (Islamic) Principle	Proactive Individual Obligation
Evidence Integrity (Immutability of data)	Hifz al-Mal (Protection of Property)	Use of security tools and read-only access to one's own data; protection of financial transactions from phishing scams and cyber theft.
Chain of Custody (Documenting movement)	Amanah/Sidq (Trust/Honesty)	Awareness of one's online footprint and responsibility for every piece of information shared or collected, thereby strengthening the integrity of the individual and community.
Reproducibility (Objective verification)	Hifz al-Aql (Protection of Intellect)	Critical filtering and verification of information sources; combating disinformation that harms the integrity of judgment and collective reason.
Legality of Collection (Respect for law)	Adl (Justice) & Hifz al-Nafs (Protection of Life/Privacy)	Respect for privacy laws and avoidance of unauthorized access to others' data (hacking), which is both a criminal offense and an ethical transgression.

Source: Authors' analysis

## DIGITAL FORENSICS AND BIOMETRICS IN THE SERVICE OF SECURITY CULTURE

Understanding forensic techniques is essential for citizens to comprehend how their digital activity can be reconstructed. This knowledge raises the level of individual caution and forms the basis of a resilient security culture. Key forensic areas include:

- **Data Table Analysis:** Forensic experts use metadata (creation date, location, author) as key evidence. Civil security culture requires awareness that applications and devices automatically record and share this data, posing a direct threat to privacy.
- **Hash Analysis and Integrity:** Hash functions are used to verify file integrity. From a religious-ethical aspect, hash analysis serves as a reminder of the need to verify the source and originality of content before downloading or spreading it, thus protecting both Property (*Hifz al-Mal*) and Intellect (*Hifz al-Aql*).
- **Steganography and Encryption:** While criminals use steganography to conceal information, encryption provides individuals with vital privacy protection. However, this must be utilized ethically and legally (Milaković, 2018).

This transition from understanding criminal procedures to building personal culture represents the foundation for a resilient society in the digital age.

## BIOMETRICS, IDENTITY, AND THE PROTECTION OF PERSONALITY (*HIFZ AL-NAFS*)

Biometric technologies (fingerprinting, facial recognition, iris scanning) represent key tools in the battle against organized crime and terrorism, enabling precise identification based on unique physical characteristics (Samardžić, 2005). Their application is efficient in Automatic Fingerprint Identification Systems (AFIS) and video surveillance analysis.

However, the mass application of biometric technology creates ethical and legal challenges that directly affect security culture:

1. **Right to Anonymity and Privacy:** The use of biometric data, especially facial recognition, is controversial due to privacy violations and potential abuse (Milanović & Radovanović, 2015).
2. **Risk of Identity Theft:** Unlike passwords, biometric data cannot be changed. The compromise of biometric data is permanent (Alghamdi & Ahmad, 2023).

**In light of Islamic concepts**, the protection of life and personality (*Hifz al-Nafs*) expands to the protection of **digital integrity**. If physical self-protection is an obligation, then protecting one's unique digital and biometric footprint is also mandatory.



- **Proactive Protection:** Citizens must be aware that biometric data used for unlocking phones or accessing applications represents extremely sensitive information. Disciplined and selective use is essential.
- **Ethical Boundaries:** Although technologies like voice recognition have forensic value in fighting organized crime, individual security culture must question the proportionality and legality of mass surveillance in relation to basic human rights, in accordance with the principles of **Justice** (*Adl*).

## THE TECHNOLOGICAL DILEMMA: EFFICIENCY VS ETHICS

The development of contemporary technology has revolutionized investigation and prosecution. Automation, Artificial Intelligence (AI), and Big Data analysis enable more efficient methods for detecting and preventing criminal activities. However, while these technologies bring significant advantages, they open deep ethical and legal questions concerning privacy, discrimination, and data abuse (Combs, 1997). This dilemma requires elevating security culture to a societal level.

AI has become a key tool, enabling the analysis of massive data quantities in record time.

- **Surveillance Analysis:** Advanced AI algorithms (e.g., Clearview AI) can search video records to identify suspects. However, mass facial recognition violates anonymity, contradicting *Hifz al-Nafs* and the right to privacy. Security culture requires vigilance regarding the boundaries of such supervision.
- **DNA and Fingerprints:** AI uses machine learning to accelerate the identification of prints and DNA profiles. While vital for justice, the storage of such sensitive data requires the strict application of the principles of Evidence Integrity and Trustworthiness (*Amanah*).
- **Digital Forensics Tools:** Automated tools (such as Cellebrite or GrayKey) allow investigators to access locked devices and deleted data. From the aspect of security culture, the existence of these tools proves that "personal digital privacy" is often illusory. Digital ethics, in accordance with *Hifz al-Mal*, requires the minimization of one's digital footprint to prevent abuse.

Predictive policing uses algorithms to analyze past data to predict where crimes will occur.

- **Ethics and Justice:** Although efficient, these systems face the problem of algorithmic bias. If the training data is biased (e.g., unconsciously favoring certain social layers or ethnic groups), the system violates the principle of **Justice** (*Adl*), creating a risk of unfair actions against certain populations (Baltezarević, 2002).
- **Preservation of Intellect (*Hifz al-Aql*):** Security culture must oppose the blind acceptance of these models, insisting on transparency and critical revision to protect the integrity of the intellect from algorithmic manipulation.

## APPLICATION OF BIG DATA IN RECOGNIZING CRIMINAL PATTERNS

Big Data technologies play a key role in analyzing diverse sources to identify criminal networks:

- **Social Networks:** Social Networks: Analysis of posts and geolocation can reveal behavioral patterns but poses risks to user anonymity.
- **Financial Transactions:** Identifying money laundering and cryptocurrency flows.
- **Communication Records:** Analyzing metadata and encrypted chats.

Machine Learning (ML) creates predictive models to discover money laundering (smurfing, layering) and cybercrime (phishing, ransomware).

- **Active Role in Protection:** While systems protect financial integrity, individuals remain the primary target. Security culture, guided by the protection of property (*Hifz al-Mal*), dictates:
  - Recognition of unusual financial transactions.
  - Avoidance of suspicious behaviors marked as money laundering.
  - Elevating digital literacy to fight phishing attacks, as ML models constantly adapt to new criminal techniques.

Ultimately, while Big Data and AI bring a revolution in criminal research, they demand a revolutionary change in the digital discipline of citizens.

## ETHICAL AND LEGAL CHALLENGES OF ADVANCED TECHNOLOGY – THE IMPERATIVE OF JUSTICE (*ADL*)

Advanced technologies significantly improve criminal investigations, but their application opens a series of ethical and legal challenges concerning privacy, legality, algorithmic impartiality, and data processing transparency (Baltezarević, 2002).

The most important question in this relationship concerns the legality of surveillance and the protection of citizen privacy.

- **Legal Regulations:** Laws like the GDPR set strict conditions for data processing and emphasize the importance of consent. However, legal frameworks in many countries are not sufficiently developed, which can lead to abuses of supervisory technology and unauthorized monitoring (Baltezarević, 2002).
- **The Islamic Imperative (*Hifz al-Hurriyyah*):** The protection of individual freedom (*Hifz al-Hurriyyah*) and privacy is a basic ethical duty. Therefore, a responsible security culture must insist on:
  - The adoption of a clear legal framework defining when and how authorities can use digital surveillance.
  - The application of judicial oversight over all monitoring operations.

The use of Artificial Intelligence (AI) carries serious risks connected with algorithmic bias. If the data on which AI is trained is biased (e.g., higher error rates in facial recognition for members of certain ethnic groups), the system creates the possibility of discrimination (Baltezarević, 2002).

- **Moral and Legal Responsibility:** Rejecting discrimination and insisting on impartiality is the foundation of the principle of **Justice** (*Adl*). Security culture requires:
  - Securing diverse and representative data for training AI systems.
  - Introducing independent auditing of algorithms to identify and correct prejudices.

Transparency in the processing and use of data collected by advanced technology is key to preserving citizen trust. Citizens are often unaware of how much information is collected about them (location, search history, social network data) and how that information is used.

- **Demand for Openness:** Security culture must actively promote laws that oblige institutions to publish how they collect, store, and use citizen data, while enabling individual rights to inspection and deletion (the "Right to be Forgotten").

The development of contemporary technology poses the challenge of how to simultaneously ensure high societal security and preserve the right to privacy. The key is finding a balance between Protection (*Hifz*) and Freedom (*Hurriyyah*).

Regulations such as the GDPR set strict rules for collecting personal data and limit mass surveillance without a justified basis (Baltezarević, 2002). One key mechanism is data anonymization, which enables the analysis of criminal patterns (predictive policing) without directly revealing identities.

However, the challenge of re-identification is real; anonymized data can often be reconstructed. Therefore, security culture must not rely exclusively on technical methods of anonymization, but on the ethical dedication of institutions ensuring data is not abused.

Biometric technologies, such as facial recognition, open key questions regarding abuse and hacking. Their wide application can lead to the creation of a "Surveillance Society" where citizens are under constant monitoring.

- **Legal and Ethical Delimitation:** Stricter regulations are required to limit the use of biometric technology exclusively to high-risk security situations.
- **Active Security Culture:** Citizens must be aware that technological efficiency must never undermine the ethical and religious imperative of **Justice** and the **Protection of Freedom**.

Achieving a balance between security and privacy requires a combination of legal, technological, and ethical approaches. The future requires the continuous adaptation of legal frameworks and technological standards to ensure respect for human rights alongside the preservation of public security.

## RECOMMENDATIONS FOR DEVELOPING ETHICAL AND DIGITAL SECURITY CULTURES

Success in the fight against cybercrime relies not merely on surveillance tools, but on the development of a holistic security culture established on ethical principles. The following recommendations outline this approach:

### 1. Strengthening International Ethical, Legal, and Interoperability Frameworks

- **Ethical Cooperation:** In the battle against transnational crime, cooperation between national and international agencies is key. However, this cooperation **must be** guided by an ethical framework for data exchange based on the universal principle of **Justice** (*Adl*).
- **Protection of Rights:** The international framework for data exchange and joint investigations must be enhanced to ensure the mandatory **Protection of Personality** (*Hifz al-Nafs*) for citizens. It is crucial to ensure that the hunt for criminals does not violate the basic rights of innocent people across different jurisdictions. Interoperability (e.g., of biometric systems and databases) must follow strict regulatory standards.

## 2. Regulation of Biometric Technology and AI based on *Hifz* Principles

- **Strict Legislation:** Although biometrics and AI represent significant progress in investigations, their use **must be** strictly regulated by legislation that ensures the protection of personality and identity (*Hifz al-Nafs*).
- **Accountability:** Implementing principles of transparency and accountability in the use of AI and biometric systems is an ethical imperative to prevent algorithmic discrimination and injustice (*dhulm*). The public **must have** trust that these tools are used only for legally and ethically justified purposes (Baltezarević, 2002).

## 3. Developing Educational Initiatives: Digital Literacy as an Imperative of *Hifz al-Aql*

- **Broad Focus:** Educational and research initiatives must not be directed only at investigators. It is paramount to develop the digital literacy of citizens, which directly strengthens the **Protection of Intellect** (*Hifz al-Aql*).
- **Critical Thinking:** Citizens must be trained to think critically about digital tools and risks to independently recognize and avoid cyber threats. Continuous investment in researching new technologies helps maintain pace with the acceleration of digital crime.

## 4. Introduction of Ethical Guidelines based on the Objectives of Sharia

- **Collaborative Development:** Ethical guidelines for the use of advanced technology must be developed in collaboration with lawyers, technologists, and human rights experts. These guidelines should encompass a holistic approach to the **Objectives of Sharia** (*Maqasid al-Shari'ah*).
- **Specific Focus:** Special focus **must be** placed on the **Protection of Property** (*Hifz al-Mal*) from financial crime and the **Protection of Freedom** (*Hifz al-Hurriyyah*) from mass surveillance, directing the use of technology exclusively toward legal and ethically justified goals.

## FUTURE PERSPECTIVES: ETHICAL COORDINATION OF TECHNOLOGIES

The future of criminalistics and security culture lies in the further integration of innovations, with a specific emphasis on:

- **Quantum Cryptography and *Hifz al-Aql*:** The development of quantum computers and cryptography will completely change data encryption and

decryption. Quantum cryptography promises higher levels of safety and data security (*Hifz al-Aql*), which will play a significant role in the fight against cybercrime and global threats.

- **Blockchain and Adl:** Blockchain technology promises significant applications in detecting financial fraud and transactions (money laundering), as well as guaranteeing the integrity of digital evidence during investigations. Its inherent transparency and immutability are in accordance with the Islamic principle of **Justice** (*Adl*).
- **Predictive AI Models and Ethical Control:** AI and deep learning can be used for predictive models to recognize and prevent criminal activities before they occur. However, these systems **must follow** strict ethical codes to avoid violating the principle of *Hifz al-Aql* (Protection of Intellect/Reason) and to prevent the unfair targeting of individuals.

## CONCLUSION

This paper has provided a critical analysis of the influence of contemporary technological achievements, primarily Artificial Intelligence (AI), digital forensics, and Big Data analysis, on the security culture of citizens, with a special retrospective on the Islamic ethical concept of the Objectives of Sharia (*Maqasid al-Shari'ah*).

The research confirms that advanced technologies have revolutionized the state's ability to detect and suppress organized crime. Automated criminal investigations, biometric identification, and predictive analytics enable faster and more precise evidence processing, which strengthens public security and the efficiency of the legal system.

However, a key finding of this work is that technological efficiency creates deep ethical and cultural challenges. Mass surveillance, the analysis of huge databases, and the inherent risk of algorithmic bias (discrimination) call into question basic human rights, especially the rights to privacy and equality before the law.

Therefore, this study shifts the focus from institutional procedures to individual and collective ethical responsibility, incorporating *Maqasid al-Shari'ah* as the foundation of a digital security culture.

It is concluded that the Islamic principles of the Protection of Personality (*Hifz al-Nafs*), Protection of Property (*Hifz al-Mal*), and Protection of Intellect (*Hifz al-Aql*) represent a moral and religious imperative for proactive, responsible, and disciplined digital behavior. Furthermore, the principle of Justice (*Adl*) demands active opposition to algorithms that introduce injustice into societal processes.

Regarding recommendations, the paper highlights the necessity for:

1. The continuous adaptation of legislation to strictly regulate the use of AI and biometrics.
2. The reinforcement of citizen digital literacy.
3. The development of ethical guidelines to harmonize technological practice with principles of transparency, accountability, and human rights protection.

The final conclusion is that the future of security lies not only in the development of new technologies (such as quantum cryptography and blockchain), **but rather** in the

construction of an ethical framework that ensures technology is used responsibly. Only in this way can a balance be achieved between collective security and the preservation of fundamental individual freedoms.

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## BUSINESS GUARANTEE IN ISLAMIC ECONOMICS

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### Abstract

The business guarantee (*el-kefale*) represents one of the fundamental institutes of Islamic law of obligations and an important mechanism for securing the fulfilment of obligations in business and financial relationships. Its essence lies in the voluntary assumption of responsibility by the guarantor (*kefil*) for the obligations of the principal debtor, thereby protecting the rights of creditors and strengthening trust between contracting parties. This institute has a firm foundation in the Quran, the Sunnah of the Prophet of Allah (pbuh), as well as in the consensus of Islamic jurists, which confirms its legal validity and permanent applicability. The paper analyses the linguistic and terminological meaning of the business guarantee, its Sharia-legal bases, conditions of validity, constitutive elements, and types, with a special emphasis on the difference between personal and material guarantees. It also considers the positions of different Islamic legal schools regarding the permissibility and scope of the guarantor's liability, especially in the context of financial obligations and violations. Special attention is paid to contemporary applications of the business guarantee through the decisions of international Sharia institutions, including the International Islamic Fiqh Academy of the Organization of Islamic Cooperation (OIC). In conclusion, the paper indicates that the business guarantee in the Islamic economy does not represent merely a legal instrument for securing obligations, but also an ethical mechanism that contributes to legal certainty, the stability of business relations, and the realization of the objectives of Islamic law (*Maqasid al-Shari'ah*) in the contemporary economic environment.

**Keywords:** business guarantee, *el-kefale*, Islamic law, Islamic economy, suretyship, contractual relations, Sharia regulations

## INTRODUCTION

Modern economic and business relations, characterized by complex contractual structures and increased financial risks, impose a need for efficient mechanisms to secure the rights of contracting parties. One of the key instruments of legal and economic security in Islamic law is the business guarantee (*el-kefale*), which represents a form of voluntary assumption of responsibility for the obligations of another entity. This institute is deeply rooted in the Quran, the Sunnah of the Prophet (pbuh), and the consensus of classical Islamic jurists, confirming its legal validity and practical relevance across different historical and social contexts.

The business guarantee in Islamic law is not merely a technical legal mechanism, but also an expression of ethical responsibility, solidarity, and social cohesion. Its



purpose is reflected in the protection of creditors' rights, the facilitation of business transactions, and the strengthening of trust among participants in economic relations, while simultaneously respecting Sharia principles of justice and the prohibition of injustice. Precisely because of this, *kefala* occupies an important place in the field of Islamic law of obligations and the modern Islamic economy.

The aim of this paper is to consider, through a descriptive-analytical approach, the concept of the business guarantee, its Sharia-legal foundations, validity conditions, constitutive elements, and types, as well as the differences in the views of Islamic legal schools. Special attention is dedicated to the distinction between personal and material guarantees, their legal treatment, and practical application in contemporary business frameworks, including relevant decisions of modern Sharia institutions. In this way, the paper seeks to contribute to a better understanding of this institute and its significance in building a stable and ethically grounded Islamic economic system.

## LINGUISTIC MEANING OF *EL-KEFALE*

In a linguistic sense, the business guarantee (*el-kefale*) signifies joining, connecting, or taking something upon oneself. In an economic and business context, this term refers to assuming responsibility for the obligations of another entity, whereby the guarantor connects themselves to the principal debtor regarding the fulfillment of the obligation. From this root stems the Quranic usage of the term, in which Allah Almighty describes the act of placing something under one's protection and care.

**"And Zakariya took charge of her"** (Qur'an: 3:37) meaning he took her under his direct responsibility and ensured her safety and security.

This meaning aligns with the statement of the Prophet (pbuh), which points to assuming an obligation and guaranteeing for another, representing the fundamental function of a guarantor in business and financial relations. Sahl ibn Sa'd (r.a.) narrates that the Prophet (pbuh) said: "'I and the guardian (protector) of an orphan will be in Paradise like this (close).'" And he pointed with his index and middle fingers. " (Bukhari, 5659)

In Sharia legal terminology, "*kefala*" (suretyship) is defined as: the joining of the guarantor's responsibility to the obligations of the principal debtor, so that the creditor may collect from any party guaranteeing the fulfilment of the obligation.

In business and financial practice, the following types of guarantees are distinguished:

- **Personal guarantee:** When the guarantor assumes the obligation that a certain person will fulfil their duty or appear before a competent authority (e.g., guarantee for presence in a procedure or the return of a detained person).
- **Financial guarantee:** When the guarantor guarantees that they will settle a monetary obligation on behalf of the debtor if the debtor fails to make payment within the foreseen period; this is equivalent to a performance guarantee or payment guarantee.
- **Guarantee of proper execution and return of property:** When the guarantor assumes responsibility that the user of rented, borrowed, or



available property will return it within the agreed period and in the prescribed condition; in modern practice, this resembles a guarantee for the return of leased items.

## SHARIA-LEGAL STATUS OF THE BUSINESS GUARANTEE

The business guarantee (*el-kefale*) represents a legally valid and fully permissible instrument in Islamic law. Its application and legal force are confirmed by authoritative sources, the Quran, the Sunnah, and the unanimous position of competent Islamic jurists.

Allah Almighty in the Quran points to the principle of assuming responsibility and ensuring the fulfillment of obligations, which forms the fundamental basis for the legitimacy of this institute in financial and business relations.

"So her Lord accepted her with good acceptance and caused her to grow in a good manner and put her in the care of Zakariya." (Qur'an, 3:37)

In another Quranic verse, Allah Almighty further confirms this legal principle, pointing to the obligation of reliably executing assumed obligations and protecting the rights of participants in business relations.

"And for he who produces it is [the reward of] a camel's load, and I am responsible (a guarantor) for it." (Qur'an, 12:72)

As previously stated, the business guarantee in Islamic law has a firm basis in the Sunnah of the Prophet (pbuh), where the permissibility of assuming responsibility for the obligations of another and protecting the rights of contracting parties is clearly indicated.

- Abu Umamah (r.a.) narrates that the Prophet (pbuh) said: "The guarantor (one who guarantees in business ventures) is the one who is responsible." (Musnad Ahmad, 22349)
- Sahl ibn Sa'd (r.a.) narrates that the Prophet (pbuh) said: "'I and the guardian (protector) of an orphan are in Paradise like this (close).' And he pointed with his index and middle fingers." (Bukhari, 5659)
- Salama ibn al-Akwa (r.a.) narrates that a funeral procession was brought to the Prophet (pbuh) for him to pray over it, and he asked: "Did he have any debt?" They said: "No." So, he prayed over him. Then another funeral was brought, and he asked: "Did he have any debt?" They said: "Yes." He said: "Pray over your companion." Abu Qatada said: "I assume his debt, O Messenger of Allah!", and then he prayed over him (Bukhari, 2173).

## CONDITIONS OF THE BUSINESS GUARANTEE

Islamic jurists have defined the following conditions for the validity and legitimacy of a business guarantee:

- **Object of the guarantee:** The guarantee can only relate to a person or property that is actually transferable or available for the fulfillment of the obligation.

- **Nature of the obligation:** The debt or obligation must be clearly defined and of such a nature that its execution can be demanded.
- **Enforceability of the obligation:** The debt must be real and inalienable, meaning it cannot be written off except by its actual settlement or official release.
- **Capacity of the guarantor:** The *kefil* (guarantor) must have the capacity, financial means, or authority to assume and fulfill the obligation they are guaranteeing.

## CONSTITUTIVE ELEMENTS OF THE BUSINESS GUARANTEE

According to Hanafi jurists, the business guarantee consists of one key constitutive element—the constructive form (offer and acceptance, i.e., *Ijab* and *Qabul*). The offer comes from the guarantor, while the acceptance comes from the creditor. Conversely, Shafi'i jurists consider that the fulfillment of five constitutive elements is required for the validity of a business guarantee contract.

The Shafi'i elements are:

- **Guarantor (*el-kefil*):** The person assuming responsibility and guaranteeing the execution of the obligation.
- **Creditor (*el-mekful lehu*):** The person who has the right to collect or protect their claims.
- **Obligation or Debt (*el-mekful bihi*):** The actual, enforceable obligation that is the subject of the guarantee.
- **Debtor or Protégé (*el-mekful 'anhu*):** The person whose obligations are being guaranteed.
- **Constructive Form (*es-siga*):** The formal legal procedure by which the guarantee contract is established and confirmed, including offer and acceptance.

This structure enables a clear distribution of responsibilities and rights among all involved parties in financial and business relations.

## TYPES OF BUSINESS GUARANTEE

In Sharia law, two basic types of business guarantees are recognized:

- **Material (Property) Guarantee:** A guarantee secured by property or concrete assets.
- **Personal Guarantee:** A guarantee in which a physical person assumes responsibility with their own being, i.e., life or personal obligation.

## PERSONAL GUARANTEE

In Sharia law, a personal guarantee implies that the guarantor (*kefil*) assumes the obligation to ensure the presence of the debtor or the person they are guaranteeing for before the creditor or a competent authority, should the person violate the law or

contractual provisions. In this case, the object of the guarantee (obligation) and the debtor are fully connected, that is, the guarantee directly relates to the debtor's conduct or execution, and the guarantor assumes the responsibility to ensure its fulfillment.

The constructive form of a personal guarantee is based on a clear and formal statement by the guarantor, in which they assume full responsibility for the execution of the debtor's obligation. In Sharia law, this statement might read: "I guarantee for this man fully, with soul and body". The rule allows the guarantor to assume responsibility using expressions symbolizing total commitment, such as guaranteeing certain vital body parts (e.g., head, neck, face, body, and soul) or vital organs (heart, brain, liver). Conversely, it is not customary to use body parts whose function is not vital for life (e.g., hand, leg, eye, ear). This approach ensures legal clarity and the seriousness of the guarantor's obligation, a view shared by Shafi'i and Hanbali jurists, confirming its applicability in formal business relations.

There is a consensus among Islamic jurists that the personal business guarantee is a legally valid and legitimate instrument. This position is shared by Hanafi, Maliki, Shafi'i, and Hanbali scholars. Their legal basis rests on Quranic principles, where Allah emphasizes the obligation of assuming responsibility.

"[Yakub] said, 'Never will I send him with you until you give me a promise by Allah that you will bring him [back] to me, unless you should be surrounded by enemies.'" (Qur'an, 12:66)

This is further confirmed by the Sunnah of the Prophet (pbuh), where the principle of responsibility is emphasized, which makes a personal guarantee legitimate in financial and business transactions.

Abu Zanad narrated from Muhammad ibn Hamza ibn Aslami, who in turn narrated from his father. His father had been appointed by Umar (r.a.) as a zakat collector. During this time, a man had previously committed intercourse with his wife's slave. Hamza took responsibility for this man and brought him before Umar (r.a.). Umar had already ordered that the man be given 100 lashes, which he confirmed. However, Umar excused the man because he was unaware of the ruling.

Additionally, regarding converts, it is narrated: "Ask them to repent and take a guarantee from them!" Then they repented, and their families guaranteed for them. (Bukhari, 2168)

Islamic scholars divide personal guarantees into two basic categories:

1. **Guarantee for financial obligations:** When the guarantor assumes personal responsibility for a debtor who owes money or material assets to a creditor. This form is universally considered a legitimate and valid instrument in business transactions.
2. **Guarantee for offenses or violation of law:** When the guarantor assumes responsibility for an offender who has violated Sharia regulations or the law.

Regarding the second category, scholars distinguish between sins against the rights of Allah and sins against the rights of other people.

- **Rights of People:** The first tendency (Hanafi and Shafi'i jurists) holds that it is permissible to assume a personal guarantee for an accused person who has violated the rights of others (e.g., causing damage, homicide).

- **Rights of Allah:** The second tendency holds that personal guarantee is invalid and illegitimate when the accused has violated the rights of Allah (e.g., penalties for alcohol consumption, adultery). In this context, Hanafi, Shafi'i, and Hanbali jurists agree that personal guarantees are not valid here, as responsibility for sins against Allah's regulations cannot be the subject of a guarantee.

*Note:* Hanbali jurists further maintain that even the first type of personal guarantee, namely, a guarantee for violations against the rights of other individuals, is neither valid nor legitimate under Sharia. Their position is based on a hadith of the Prophet (peace be upon him), which emphasizes the impossibility of assuming responsibility for sins committed in contravention of Allah's commands.

This approach reflects the principle in Sharia law that the legal validity of a guarantee depends on the nature of the obligation and the type of liability involved. Such distinctions are essential for ensuring legal certainty and ethical predictability in financial and commercial transactions.

‘Amr ibn Shu‘ayb reported from his father, who reported from his grandfather, that the Prophet (peace and blessings be upon him) said: *“There is no guarantee or surety in matters of punishments.”* (Al-Bayhaqi, 11199)

From the cited hadith, it is evident that the Prophet (peace be upon him) prohibited the assumption of responsibility by a guarantor (*kafil*) in the context of criminal proceedings and the execution of punishments for violations against Allah's commands. Hanbali jurists further support their position with a rational argument, stating that it is illogical and unacceptable to require a guarantor (*kafil*) to bear the consequences of another person's actions, namely, the *makfūl ‘anhu* (the accused), if that individual fails to appear or fulfill his obligation regarding the implementation of the punishment.

According to this principle, the legal validity of a guarantee in Islamic law is directly tied to the nature of the obligation and the subject of liability. This distinction is essential for safeguarding legal certainty and ensuring fairness in financial and commercial transactions.

Consequently, the opinion of the Hanbali jurists may be regarded as closest to the Sharia truth, since it aligns with the Qur’anic principle: *“...And every soul earns not [blame] except against itself, and no bearer of burdens will bear the burden of another.”* (Qur’an, 6:164) This confirms that responsibility cannot be transferred to a third party for actions that he himself has not committed.

## MATERIAL BUSINESS GUARANTEE

In Sharia law, a material business guarantee is defined as the guarantor assuming responsibility for the debt of another person, whereby the debtor remains primarily responsible for fulfilling their obligation. In other words, it is a financial instrument where the guarantor guarantees the fulfillment of the debtor's obligation via their material assets, ensuring creditor protection and legal security.

Material business guarantee is a valid and legitimate instrument, confirmed by the Sunnah and consensus of scholars. Unlike personal guarantees, Sharia jurists have

not strictly defined the formal business form of material guarantees. It can be established in various ways, such as explicit statements: "I guarantee his debt with the amount of one thousand euros" or "I guarantee for everything you buy in this business venture".

A key condition is the validity of the debt. A debt is considered valid if the debtor can be released from it only by full settlement or if the creditor decides to waive the collection. Islamic scholars (Hanafis, Malikis, Shafi'is, and Hanbalis) agree that the nature, form, and quantity of the debt are not conditions for the validity of a material guarantee. This is because *kefalet* functions on the principle of solidarity and voluntary assumption of obligation. For example, a guarantor can say: "I guarantee you for what the debtor owes" or "I guarantee for what you sell to Ahmed," even if the debt amount is unknown. However, a view attributed to Imam Shafi'i (partially accepted by others) suggests such a guarantee is not valid because the guarantor must know the type and quantity of the debt to avoid legal uncertainty.

All scholars agree that the debt must be an actual obligation of the debtor. If the debt does not represent a real obligation, the guarantee is not valid.

The guarantor is released from obligations in the following situations:

1. **Settlement of obligations:** When the main debtor fully settles the debt.
2. **Creditor's decision:** If the creditor explicitly releases the guarantor (e.g., "You have no further obligations").
3. **Release or prolongation for the debtor:** If the creditor releases the main debtor or grants a prolongation, the guarantor is released or the deadline is proportionally extended for them as well.

These principles ensure that the guarantor's responsibility is directly linked to the debtor's actual obligation, thereby preserving legal certainty, predictability, and fairness in financial and commercial transactions in a manner consistent with Sharia.

## TERMINATION OF BUSINESS GUARANTEE

The business guarantee terminates in the following situations:

- **Surrender of the debtor:** When the debtor surrenders to authorities or the creditor.
- **Release of the guarantor:** If the creditor releases the guarantor from claims.
- **Death of the debtor:** If the debtor dies, the guarantor's obligations cease (unlike the death of the creditor, where obligations remain).
- **Settlement of debt:** When the debt is fully paid.
- **Release of the main debtor:** If the debtor is released from the debt, the guarantor is automatically released.

## DECISION NO. 148 (16/6) – BUSINESS (COMMERCIAL) GUARANTEE

The International Islamic Fiqh Academy of the OIC, at its 16th session in Dubai (2005), issued a decision regulating business and trade guarantees.

**1. Definition** In a Sharia context, a business guarantee implies the guarantor assuming responsibility relative to the debtor to ensure debt settlement or the execution of other legal responsibilities. *Note:* This differs from "commercial sponsorship" (licenses), where a citizen may transfer or assign a business license to a non-citizen for business activities.

**2. Main Forms of Commercial Guarantee (Sponsorship)**

- **Assigning a license to a non-citizen:** The citizen allows the non-citizen to use the license for independent activity. The non-citizen finances the project entirely, and the citizen appears formally as the owner.
- **Joint use of license (Partnership):** The citizen participates with the non-citizen, earning fixed or periodic income. The non-citizen contributes capital and labor, and profit/loss is distributed according to agreement.

**3. Sharia Status and Conditions**

- **Assigning license without financial obligation:** Considered innovative; not a traditional guarantee. The right can be transferred with or without compensation, provided there is no deception or legal violation.
- **Joint use with contribution:** Implemented through financial contribution or license assignment with fair valuation. Profit and loss are shared according to agreement, making the transaction Sharia-valid.

**4. Recommendations** The Committee recommends that the OIC support the development of a common Islamic market, facilitate the free movement of capital, goods, services, and labor, and improve trade among Islamic countries.

## CONCLUSION

Based on the foregoing, it can be concluded that the business guarantee (*el-kefale*) represents one of the fundamental and legally legitimate instruments of Islamic law of obligations, confirmed by the Quran, Sunnah, and consensus of jurists. Its essence lies in the voluntary assumption of responsibility to protect the rights of others, achieving legal certainty, business stability, and social solidarity. The analysis of different types shows that Islamic law offers a flexible normative framework adaptable to various business situations. The distinction between personal and material guarantees, and their permissibility regarding the nature of the obligation, indicates the precision and ethical consistency of the Sharia legal system. It is particularly significant to emphasize that responsibility cannot be transferred in matters relating exclusively to the rights of Allah, confirming the balance between justice and individual moral responsibility. Contemporary decisions by bodies like the OIC Fiqh Academy confirm the relevance of this institute, showing that Islamic law is a dynamic framework capable of responding to modern challenges. Thus, the business guarantee is not only a legal tool but a mechanism for building trust and ethical responsibility in business relations.

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# INFLATION AS A MAN-MADE PHENOMENON: EXPLORING ALTERNATIVE SOLUTIONS BEYOND CONVENTIONAL POLICY

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## Abstract

Islamic economic thought views the economy as an ethical system where all human activities, including economic transactions, are guided by divine principles. The historical analysis of Islamic scholars, such as Al-Maqrizi, provides a foundational framework by categorizing inflation not only by its economic drivers but also by its ethical origins, specifically distinguishing between unavoidable, natural causes and those stemming from human error and misconduct.

The goal of this paper is to present instruments for combatting inflation beyond the conventional monetary and fiscal tools. It argues that inflation is, above all, a man-made phenomenon, often exploited for the benefit of a small minority. This toleration of inflation is a direct challenge to core Islamic values such as justice (*adl*), moderation (*wasatiyyah*), and benevolence (*ihsan*), which are meant to govern economic life. To prevent such a scenario, Islamic teachings, such as the prohibition of *riba* (interest), *gharar* (excessive risk), *maysir* (gambling), hoarding, and the abuse of asymmetric information must be implemented to minimize the negative consequences of inflation. From this perspective, stability is achieved not through reactive, crisis-management policies, but through a proactive, preventative approach.

**Keywords:** Riba, Hoarding, Inflation, Hisba, Al-Maqrizi

## INTRODUCTION

In an ideal market economy, a product's price should reflect the customer's subjectively assessed utility (value). Therefore, a price change should signal a change in that perceived value. However, when the general price level fluctuates due to external factors such as inflation, price loses its precision as a measure of value over time. This makes it impossible to accurately compare time-based indicators like yields, income, or debt.

Since inflation, the general increase in prices, is a persistent and pervasive phenomenon in modern economies, the question becomes: Why is inflation truly problematic? If all prices doubled simultaneously, the inflation rate would be 100%. However, this would simply mean the numbers on banknotes and price lists double, while purchasing power remains constant. In such a theoretical scenario, all prices,





wages, and profits would adapt immediately, and a new equilibrium would be achieved at a higher price level.

However, in the real world, there is no simultaneous adaptation of prices. Economic agents do not possess the same information, and many are bound by contractual obligations that make immediate price changes impossible. Furthermore, agents react to situations differently. Social interaction does not follow the rigid laws of natural sciences, where a specific action leads to a defined reaction. Allah (ﷻ) created different laws for human interaction.

Therefore, the core problem with inflation is the delay in price adaptation. Some economic agents can change their prices more easily, while others suffer disadvantages as their income fails to adapt to higher prices, causing a loss in purchasing power. Consequently, from an Islamic perspective, inflation fundamentally threatens the principles of economic justice (*adl*) and social well-being (*falah*).

Taking this ethical challenge into consideration, this paper adopts a novel approach: we do not focus on inflation merely as an external phenomenon, but analyze the degree to which it is a man-made phenomenon, beneficial to some while harmful to others. We view inflation not just as a result of external events, but often as a result of human actions such as corruption, bad governance, and monopoly.

## CAUSES OF INFLATION: AN ISLAMIC PERSPECTIVE

Inflation is commonly defined as an increase in the general price level that occurs when individual price increases collectively outweigh simultaneous price decreases. While fluctuations in individual prices are normal in a market economy, the term "inflation" specifically refers to the net increase in the overall price level.

This leads to the question: What causes a change in the general price level? To address this, it is worth noting the early economic thought of Al-Maqrizi (1364–1442), who divided inflation into two fundamental types: natural inflation and man-made inflation.

Natural inflation is caused by external factors beyond human control, such as natural disasters (droughts, floods) that lead to crop failures and scarcity. This type of inflation acts as a supply-side shock, where a dramatic decrease in inventory causes prices to soar, leading to economic congestion and potential famine. (Akbar & Al-Faizin, 2019) This view aligns partially with the conventional concept of cost-push inflation, which occurs when costs exceed productivity gains, forcing firms to raise prices to maintain profitability. Factors include higher raw material costs, wage hikes, or supply chain disruptions, such as those seen during the COVID-19 pandemic.

In contrast, man-made inflation is attributed directly to human error and misconduct. Al-Maqrizi identified factors such as corruption, poor governance, excessive taxation, and the over-circulation of debased currency (especially *fulus* made of copper) as primary drivers. This diverges from conventional models by assigning ethical agency to economic instability. It posits that significant inflation is not merely a consequence of "market forces," but a direct result of monopolization

driven by injustice and greed. For example, in Al-Maqrizi's time, authorities hoarded staple foods to maximize profit at the expense of the community (Akbar & Al-Faizin, 2019).

Al-Maqrizi's approach essentially distinguishes between market-driven and artificial price increases. Natural inflation should be manageable in a functioning market, where agents absorb temporary shocks. When prices for essentials like energy or food increase due to conflict or crop failure, it creates a cost-push shock. This forces households to spend more on necessities, reducing purchasing power for other goods (substitution effect).

However, from a purely macroeconomic perspective, if we assume a closed economy without state intervention, aggregate demand should remain constant. A household cannot spend more money than is available. While agents might dip into savings or take loans to cover costs, this does not increase overall aggregate demand because withdrawing money or taking a loan reduces the loanable funds available for others (Creutz, 1997).

Real, persistent inflation (man-made inflation) enters the picture when we consider monopolization. Artificial monopolies, often supported by political elites, can restrict supply to demand higher prices. However, the major driver for inflation is the increase in money supply, as money is the medium of exchange relied upon by all agents. Any unjustified increase in money supply (whether through debasement or printing) impacts the entire economy, especially when the central bank lacks autonomy.

As Al-Maqrizi pointed out, man-made inflation is impossible without the help of state authorities. It is often a two-step process. First, the state expands the money supply to finance deficits via debt issuance or central bank creation. This raises aggregate demand, putting upward pressure on prices. Secondly, new money does not enter the economy uniformly. Agents who receive it first (governments, banks, contractors) receive it at lower interest rates and spend it before prices adjust. Later recipients face higher nominal prices. This distributional asymmetry is the core insight of the Cantillon effect, explaining why inflation benefits a small minority while distorting markets.

Beyond benefitting specific agents, this serves as a tool for governments to finance deficits (especially during crises) and ease real debt burdens. Furthermore, rising prices increase nominal incomes, raising tax revenues through "bracket creep" even if real activity remains unchanged.

## **INFLATION AND MISCONDUCT**

Inflation changes the current equilibrium of an economy. While conventional views often present it as a neutral, technical problem, treating it as a simple fact removes accountability from human actors. Generally, it is said that "market conditions" or an "invisible hand" drive prices up and down. However, what would such market conditions, or supply and demand, be without economic agents? These agents cause price shifts, and their market power serves as their tool.

Despite being a problem for the majority, inflation can be very beneficial for some economic agents. In fact, in many economic transactions, one contracting party tries to exploit a certain advantage over the other, particularly through better information. For example, sellers with superior information often exploit buyers who do not know the real value of goods or the consequences of inflationary tendencies.

To explain this perspective, we must return to the basics of economic exchange. In every exchange, someone offers something the other party wants. Even when an individual possesses a useless object, if it could be useful to someone else, the owner will not be willing to give it away for free. The more urgently the other party needs the object, the higher the demands the owner will make. As Gesell stated:

“By taking possession of or appropriating an object that we cannot use ourselves, but which we assume or know is sought after by others, we can only pursue one goal: to cause these others difficulties and to exploit these difficulties. We want to profit from the object, for to cause someone difficulties and to exploit this difficulty is to profit.” (Gesell, 1949).

The initial association here might be the exploitation of the poor and needy, but this is not always the case. Consider, for instance, a large corporation acquiring a farmer's land to expand its factory, or an individual selling an inherited piece of furniture at an inflated price despite having no personal need for it. With this in mind, specific market conditions can be created to artificially increase prices and generate extra profits as quickly as possible.

We see many situations where such manipulations occur. For example, companies with market power can easily increase prices because consumers lack adequate alternatives. This "profit-push inflation" is especially problematic for goods consumed daily, such as staple foods. A price increase in staple foods significantly impacts the cost of the consumer basket.

There is also the fear of a “crowding out” effect, where wealthier consumers displace poorer ones because they can pay higher prices and buy in larger quantities. This was visible in supermarkets worldwide during the COVID-19 pandemic, when people hoarded food and essential products due to fear of supply chain disruptions. If there is no real competition among companies, or if a market is dominated by state-sanctioned oligopolies, these problems become much more intense, and the majority of the population effectively transfers its wealth to a minority.

This wealth transfer during inflation is particularly evident for savers. In an Islamic economy, this is even more serious because savers do not receive interest income, whereas in a conventional economy, interest rates theoretically adapt to inflation. Of course, savings do not disappear, but purchasing power is transferred to other economic agents.

One might assume that in a conventional system, interest rates will instantly adjust to inflation, thus protecting savers and maintaining stability. However, the interest rate, being the price of money, behaves distinctly from other prices. Interest expenditure is calculated by multiplying the interest rate by the principal borrowed. If, for example, the initial interest rate before inflation was 5% and the inflation rate rises to 5% (implying a new nominal rate of roughly 10% to cover inflation), the interest rate effectively doubles. Consequently, interest costs double.

In contrast, all other costs (like revenue and operational costs) generally only adapt by the inflation rate (e.g., 5%). Let us explain this with an example. The table below shows the revenues and costs of a simple hypothetical company. We assume the company took a loan of €1,000,000 at an interest rate of 5% before inflation, with the condition that the interest rate adapts to the inflation rate. We also assume that all prices simultaneously adapt to inflation.

While revenue and all other costs increased by 5%, interest costs doubled (increased by 100%) because the principal is multiplied by the new interest rate of 10%. This caused profits to fall by about 63%, lowering the net profit margin to 2.5%. Such a decrease in profits causes severe problems; to restore original profitability, the company would be forced to make significant price increases or severe cost reductions.

This example demonstrates that interest costs cause a dramatic increase in the financing costs of economic agents. Therefore, increasing interest rates, contrary to the arguments of conventional economics, is not necessarily a cure for inflation. Instead, it can act as a trigger for an additional increase in inflation, which ultimately leads to a decrease in consumption and investment.

**Table 1**

*Costs before and after Inflation at a Hypothetical Company*

Income statement	Before inflation	After inflation	Change
Revenue	€1,000,000	€1,050,000	+5%
- Cost of Revenue	€880,000	€924,000	+5%
- Interest Costs	€50,000	€100,000	+100%
Profit	€70,000	€26,000	-62.9%
Net Profit Margin	7.0%	2.5%	

*Source: Author's Calculations*

## ISLAMIC NORMS TO COMBAT MISCONDUCT

To combat inflation, we must look beyond fiscal and monetary tools to the ethical roots of the Islamic economy. The central solution is the prohibition of *riba* (interest). *Riba* is not only interest, but covers the prevention of any unjust exchange contracts from developing. This principle can be derived from the following hadith of the Prophet Muhammad (ﷺ):

“Gold is to be paid for by gold, silver by silver, wheat by wheat, barley by barley, dates by dates, and salt by salt, like for like and equal for equal, payment being made hand to hand. If these classes differ, then sell as you wish if payment is made hand to hand.” (Sahih Muslim, 2025).

This rule implies that exchanging money for money must be done on the spot and at par value. If money could be exchanged at an excess, it would be hoarded to earn

interest rather than used as a medium of exchange. Abu Hamid al-Ghazali eloquently described this:

“One who practices interest on Dirhams and Dinars is denying the bounty of Allah and is a transgressor, for these coins are created for other purposes and are not needed for themselves. When someone is trading in Dirhams and Dinars themselves, he is making them as his goal, which is contrary to their objectives. Money is not created to earn money, and doing, so is a transgression.” (Islahi & Ghazanfar, 1998)

The Shari’ah also prohibits to exchange different types of money (e.g. euro to dollar) with a delay, in order to prevent the conclusion of interest-based contracts in foreign currencies. Speculation with foreign currencies is also minimised by only allowing spot transactions, which abolishes margin purchases and short sales of foreign exchange.

Prohibiting interest serves a critical preventative function. It neutralizes the sharp rise in financing costs that occurs when nominal interest rates adjust to inflation (as shown in Table 1), cutting off the vicious cycle of cost-push inflation.

One of the major challenges in an Islamic framework is the status of (interest-free) loans, the so-called *qard hasan*. The major motivation to give such a loan is the reward by Allah (ﷻ) which is explicitly mentioned in the Qur’an:

**“Who is it that would loan Allah a goodly loan so He will multiply it for him and he will have a noble reward?”** (Qur’an, 57:11)

However, during periods of inflation, those who lend money (waiting for repayment) can lose a large portion of the real value of the loan. In the case of a credit sale of a physical asset, sellers can calculate expected inflation into the sales price. However, this is not possible with a loan. One possible solution would be to issue loans in the form of gold. The disadvantage here is that the price of gold may skyrocket, making it difficult for borrowers to repay their debt. This dilemma clearly illustrates the complexity of inflation and its negative impact on economic agents.

It is also important to analyse the situation regarding foodstuffs. According to the hadith mentioned above, the exchange of foodstuff for foodstuff must be a spot transaction. This rule is relevant not only for a barter economy but also for an inflationary economy, where trust in the official currency diminishes significantly and people begin to use substitutes. Ibn al-Qayyim explained this rule in the following way:

“When people would be allowed to exchange food on credit, they would do this only when it is profitable and would never sell their goods at once, because they would hope realise a profit by selling them later. In this case, affected people could hardly buy food of their choice, because ordinary people often do not have cash. People, especially in rural areas, carry little cash and usually exchange one type of grain for another. That is why it was wisely and mercifully by the Legislator to prohibit deferred payment in exchange of food items, as He did in the case of precious metals.” (Islahi A. A., 1996).

Therefore, the same rules apply to foodstuffs (or other substitutes): they must be exchanged on the spot and at equal value, provided they are of the same type (e.g., wheat for wheat). Even the exchange of different types of food must be concluded on the spot. The intention behind these rules is to preserve the primary purpose of these assets: money is used for exchange, while foodstuffs are meant for nutrition. Since every economic agent relies on money and food, the hoarding of either leads to the exploitation of consumers. Thus, just as interest affects the entire economy, so too does the scarcity of food.

The manipulation of staple food prices causes profit-push inflation. Therefore, in addition to the rules regarding the exchange of food, the Shari'ah provides specific regulations to prevent the manipulation of food prices. A hadith narrated by Imam Ahmad states: "The one who hoards food for forty days, expecting a price increase, has disavowed from Allah and Allah has disavowed from him." (El-Qaradawi, 1997) Even donating the profit as charity (*sadaqa*) does not erase this sin, as stated in another hadith: "If anyone hoards grain for forty days and then gives it in *sadaqa*, that will not act as an atonement for him." (Mishkat al-Masabih, 2025)

These *ahadith* clearly prohibit speculation with food, serving as a preventative measure against profit-push inflation. Indeed, any hoarding with the goal of manipulating prices is forbidden in Islam, as emphasized by the hadith: "Do not hoard; otherwise, Allah will withhold from you."

Based on this, scholars have concluded that hoarding is prohibited under two conditions: first, when hoarding is harmful to the population at that specific time; and second, when the hoarder aims to generate excessive profits by inflating prices. (El-Qaradawi, 1997) Consequently, every monopolization of goods is forbidden because it is motivated by greed and results in injustice, regardless of whether it concerns money, food, or other commodities. Therefore, market structures must be analysed carefully to avoid market price manipulation, which drives inflation.

Furthermore, Islam addresses the issue of information asymmetry. During periods of inflation, those who possess superior information regarding price developments, or those with the power to raise prices, hold a distinct market advantage. However, the manipulation of information is forbidden, as illustrated by the following example:

Abdullah Ibn `Umar told us that the people used to buy food from the caravans in the lifetime of the Prophet. The Prophet (ﷺ) used to forbid them to sell it at the very place where they had purchased it (but they were to wait) till they carried it to the market where foodstuff was sold. Ibn `Umar said, 'The Prophet (ﷺ) also forbade the reselling of foodstuff by somebody who had bought it unless he had received it with exact full measure.' (Sahih al-Bukhari, 2025).

At the time of the Prophet (ﷺ), city traders would often wait for uninformed merchants arriving from the countryside, intercepting them before they could learn the actual market conditions in the city. The better-informed city dwellers used this advantage to make extra profit at the expense of the uninformed sellers. This same principle of prohibiting the exploitation of information asymmetry should apply during periods of inflation. Companies can generate "inflationary profits" while ignoring the need for salary increases, simply because they possess superior market

knowledge and can benefit from the inflationary situation before employees or consumers adjust.

Similarly, individuals must be prevented from speculating based on information—for example, buying goods on credit with the specific knowledge that inflation is imminent, intending to profit solely from the price difference. Therefore, any gambling or speculation is strictly prohibited in Islam, as speculative behaviour reduces economic life to a game of chance and creates conditions for moral decay.

This discussion raises a critical question: what is the role of the state? The general rule in Islamic economics is that the state should not intervene in price formation. During the time of the Prophet (ﷺ), prices rose significantly, prompting people to appeal to him to fix prices for them. In response, the Messenger of Allah (ﷺ) said:

“Allah is the one Who fixes prices, Who withholds, gives lavishly and provides, and I hope that when I meet Allah, none of you will have any claim on me for an injustice regarding blood or property.” (Sunan Abi Dawud, 2025).

However, this hadith does not imply that price controls are entirely forbidden. If market manipulations occur, the state must intervene to protect both consumers and suppliers, ensuring that neither side is disadvantaged. (El-Qaradawi, 1997) In this context, the state and its institutions bear significant responsibility. First, they must organize inspections to detect improper actions, particularly during economic crises. Traditionally, this function was known as *hisba* and holds a long tradition in Islam. An appointed official, the *Muhtasib*, was responsible for monitoring the market and uncovering manipulations. Initially, the Prophet Muhammad (ﷺ) himself would often undertake market inspections; a tradition continued by the first four caliphs of Islam (Murtuza, 2002).

Secondly, state control and intervention must be carefully moderated to avoid overreach. As the historian and economist Al-Maqrizi observed concerning medieval price hikes, a significant component of “man-made inflation” is generated not by natural economic forces, but by failings within the government itself. Establishing state-owned monopolies or granting the state the power to fix prices can widely open the door to corruption. Therefore, only the misconduct of economic agents should be punished, not economic activity itself.

Furthermore, the primary cause of inflation is a massive increase in the money supply. Today’s fiat currency supply can be easily manipulated. While there may be justifiable reasons to increase the money supply, such as financing a defensive war, post-disaster reconstruction, or managing a pandemic, the negative effects of inflation dictate that this measure must remain an exception. It should be executed only after consultation with a diverse group of experts, including Shari’ah scholars and economists. It is of utmost importance to calculate consumer baskets and price indices by income groups. This allows policy-makers to assess which demographics suffer relatively more and determine whether policy intervention is needed to support lower-income groups (Abojeib, Haneef, & Mohammed, 2018).

Ultimately, the key to solving problems in an Islamic economy is not found solely in inspections and controls, but in the moral behaviour of its agents. The fundamental rule in the Islamic moral economy is captured in the following hadith, where the

Prophet (ﷺ) said: “None of you will have faith till he wishes for his brother what he likes for himself” (Sahih al-Bukhari, 2025).

This is a profound statement and a crucial rule for human interaction. The dilemmas discussed previously revolve around a central ethical problem: whether or not to abuse one's market position. The question becomes whether one prioritizes oneself without regard for others. To maintain fraternal and respectful relationships, individuals must support their colleagues, friends, and neighbours. During the time of the Prophet (ﷺ), the first generation of Muslims was willing to give more to others than they kept for themselves. This was exemplified by the people of Madinah (the Ansar), who welcomed the Emigrants from Makkah. Allah (ﷻ) speaks to this in the Qur'an:

**“And [also for] those who were settled in al-Madinah and [adopted] the faith before them. They love those who emigrated to them and find not any want in their breasts of what the emigrants were given but give [them] preference over themselves, even though they are in privation. And whoever is protected from the stinginess of his soul - it is those who will be the successful.”** (Qur'an, 59:9).

The reason for the revelation was that a man in need approached the Prophet Muhammad (ﷺ) for help. When the Prophet's own wives had nothing to give, he asked if anyone would host the man for the night. A man from the Ansar (the people of Medina) volunteered, even though he had very little himself – just enough food for his children. He instructed his wife to put the children to bed without dinner and to extinguish their lamp so that their guest would think they were eating with him. They went hungry themselves to ensure their guest was fed. The Prophet later praised their selfless act, revealing that Allah was pleased with what they had done, and a verse from the Quran was revealed about them: **“but give [them] preference over themselves, even though they are in privation.”** (Ibn Kesir, 2002)

This narration emphasizes the profound value of prioritizing the needs of others before one's own, a core principle in Islam. However, while we cannot realistically expect most people to consistently sacrifice their own self-interest, we can expect every individual economic agent to take all possible steps to minimize the adverse effects of inflation.

In practical terms, this means that when a company realizes inflationary profits (revenue gains driven by inflation), it has an obligation to help its employees maintain an adequate level of real income. This expectation is not solely based on Islamic ethical frameworks but is also rationally grounded in business strategy: a company cannot achieve long-term success without well-compensated and motivated employees. It is, therefore, highly immoral and strategically unsound for a company to distribute high bonuses and dividends to shareholders while its employees struggle to meet their basic needs due to inflation.

Similarly, any crisis can only be solved when the community acts in solidarity. The principles of *zakat* and *waqf* educate Muslims to help others and distribute a portion of their accumulated wealth. *Zakat* serves as a powerful tool for social and economic stabilization, directly combating wealth concentration and reducing inequality. Above all, it fosters empathy for those in need. The same is true for the institution of



*waqf* (endowments), where wealth is dedicated to improving the lives of others by financing educational institutions, water supplies, and orphanages. Ultimately, solidarity, not selfishness, is the sustaining force that allows a society to grow.

## CONCLUSION

Inflation is a complex, multi-dimensional crisis rooted not merely in market forces but in both external, uncontrollable factors and human injustice. External factors include exceptional circumstances such as pandemics, natural catastrophes, or invasions. In such dire situations, where the survival of the state or its people is at stake, exceptional measures must be undertaken. Just as Islamic law permits the consumption of *haram* (forbidden) food for survival, the government may resort to an “inflation tax” to generate revenue for emergency public spending. However, to prevent abuse, such situations must be objectively determined by experts.

Primarily, however, inflation is a man-made phenomenon, often driven by an uncontrolled increase in the money supply. Under these circumstances, a strong moral foundation is essential to minimize its negative consequences. Islam emphasizes the constant awareness that Allah (ﷻ) observes all behaviour and that individuals will be held accountable for their actions. Consequently, true believers will not abuse their market power to profit from inflation.

et, the question remains: how many people can resist the trials caused by inflation? It is easy to claim virtue when not facing hardship, but continuous adversity often alters human behaviour. This reality is clearly reflected in the prayer of the Prophet (ﷺ): “O Allah, I seek refuge with You from disbelief and poverty.” A man said: “Are they equal?” He said: “Yes.” (Sunan an-Nasa'i, 2025) .

Therefore, prolonged high inflation leads to individual distress, a breakdown of social cohesion, and an increase in public and private misconduct. The erosion of trust in money, markets, and institutions acts as a direct catalyst for the erosion of moral and ethical norms. From this perspective, Islamic rules, such as the prohibition of *riba* (interest), *gharar* (excessive uncertainty), *maysir* (gambling), hoarding, and the abuse of asymmetric information, serve, in effect, as macroeconomic stabilization policies.

The Islamic framework is not anti-market but pro-justice; it allows the market to operate freely while empowering the state to intervene when that freedom harms society. These measures offer a path toward stability achieved not through reactive crisis management, but through a proactive, preventative approach. Regardless of religious affiliation, the principles of justice, honesty, moderation, and social responsibility underpinning the Islamic economic framework are timeless and universally applicable. Adopting these principles can lead to a more stable economy, a more just society, and a stronger foundation for human well-being, demonstrating that a truly stable financial system is inseparable from an ethical one.

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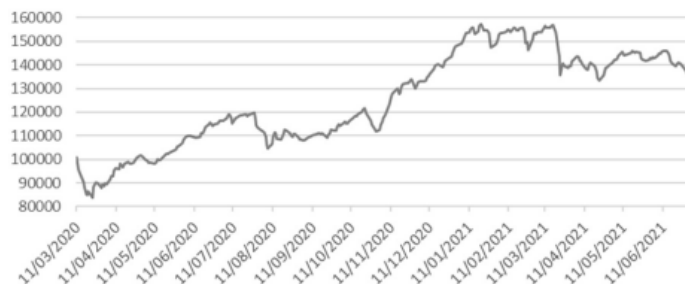
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**Figure 1**

*Turkish Stock Market Trend XU100*



Source: Authors' calculations

**Table 1**

*Values of Pseudo-correlation Deetermination Coefficients in the Isolated Model of Predicting Perception of Football Quality*

Model	-2 Log likelihood	Coxov & Snellov R <sup>2</sup>	Nagelkerkeov R <sup>2</sup>
1	37,039	0,071	0,129

Source: Redžepagić, B., Plojović, Š., & Ujkanović, E. (2013). Opportunities of transitional potential of BH sports and its more successful connection with the overall tourism offer of Bosnia and Herzegovina. *Economic Challenges*, 2(4), 15-36.

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- You can cite your data as part of a sentence (narrative citation) or at the end in parentheses (parenthetical citation).
- For two authors, use 'and' in narrative citations; and '&' in parenthesis.
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The general citation style is:

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- **Single author:** Meta (2015) says, "each of these funding sources has its own characteristics, advantages, and disadvantages that should be considered when choosing between them" (p. 19)
- **Two authors:** Kalač and Jokić (2017) highlight that "a certain number of the most successful entrepreneurs use part of their achieved financial surpluses for various humanitarian and socially beneficial purposes..." (p. 73).
- **Three or more authors:** Plojović et al. (2022) argue, "Resources (human, material, financial) are needed to achieve the goal. For example, if we talk about software and mention human resources, they are closely related to the complexity of the project" (p. 3).

### Example of a parenthetical citation

The general citation style is:

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- **Single author:** "each of these funding sources has its own characteristics, advantages, and disadvantages that should be considered when choosing between them." (Meta, 2015, p. 19)
- **Two authors:** "a certain number of the most successful entrepreneurs use part of their achieved financial surpluses for various humanitarian and socially beneficial purposes..." (Kalač & Jokić, 2017, p. 73).
- **Three or more authors:** "Resources (human, material, financial) are needed to achieve the goal. For example, if we talk about software and mention human resources, they are closely related to the complexity of the project." (Plojović et al., 2022, p. 3).

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- Summarizing is very similar to paraphrasing in that it also involves conveying someone else's ideas in your own words to condense the material.
- A summary includes only the main points and/or ideas of a longer passage or entire work.
- For two authors, use 'and' in narrative citations and the ampersand '&' for parenthetical citations.
- For three or more authors, use 'et al.' after the first author's surname to indicate there are additional authors.
- Include only the author/year from the article you are summarizing. You do not need to include page numbers or section identification.
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**Example of narrative paraphrasing**

The general citation style is:

Author (year) summary.

- **Single author:** Meta (2015) emphasizes that investing only makes economic sense if it can achieve effects.
- **Two authors:** Kalač and Jokić (2017) state that the problem does not arise if the lease period is identical or approximately identical to the economic and technological lifespan of the leased item.
- **Three or more authors:** Plojović et al. (2022) emphasize that communication is the way ideas are transmitted from one subject to another.

**Example of parenthetical paraphrasing**

The general citation style is:

Summary (Author, year)

- **Single author:** Investing only makes economic sense if it can achieve effects (Meta, 2015).
- **Two authors:** The problem does not arise if the lease period is identical or approximately identical to the economic and technological lifespan of the leased item (Kalač & Jokić, 2017).

- **Three or more authors:** Communication is the way ideas are transmitted from one subject to another. (Plojović et al., 2022).

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- **Multiple authors:** Plojović, Š., Bušatlić, S., & Bećirović, S. (2022). *Project Management: (with Examples from the IT Industry)*. Novi Pazar: University of Novi Pazar.
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### b) Chapter of a book (monograph)

- **One editor:** Lamotte, J., & Smith, K. (2019). Play therapy. In: V. Carrion (Ed.), *Assessing and treating youth exposed to traumatic stress* (pp. 129-140). Washington: American Psychiatric Association.
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