DOI: https://doi.org/10.36719/2789-6919/48/71-81

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Spending for Happiness: A Comparative Study Using Data Envelopment Analysis

Abstract

This study, titled Spending for Happiness: A Comparative Study Using Data Envelopment Analysis (DEA), examines the efficiency of government spending in enhancing happiness across 10 Middle Eastern and North African (MENA) countries. Grounded in happiness economics, the research builds on theories like the Easterlin Paradox (1974), which posits that income boosts happiness only up to a threshold, and explores debates on state intervention (Pigou vs. Buchanan). Using an output-oriented DEA model with variable returns to scale (VRS), the study evaluates how effectively public spending (input) translates into higher happiness scores (output). Key findings reveal stark disparities: the UAE (1.0 efficiency score) and Saudi Arabia (0.98) lead due to strategic investments in infrastructure and social programs, while Lebanon and Egypt, despite scoring 1.0, reflect outlier contexts (economic collapse and austerity, respectively). Mid- and low-efficiency countries (e.g., Tunisia, Jordan) underscore institutional weaknesses. The study concludes that happiness depends not on spending volume alone but on governance quality, transparency, and targeted allocations. Recommendations include strengthening fiscal oversight, prioritizing service quality over budget size, and fostering regional policy exchanges. By bridging economic and well-being metrics, the paper advocates for institutional reforms to maximize the impact of public expenditure on societal happiness, offering a framework for policymakers in MENA and beyond.

Keywords: *Data Envelopment Analysis, public spending, happiness, societial happiness, budget size*

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Xoşbəxtlik üçün xərcləmə: Məlumat zərfinin təhlilindən istifadə edərək müqayisəli bir araşdırma

Xülasə

Xoşbəxtlik üçün xərcləmə: Data Envelopment Analysis (DEA) ilə Müqayisəli Tədqiqat adlı bu araşdırma 10 Yaxın Şərq və Şimali Afrika (MENA) ölkəsində xoşbəxtliyin artırılmasında dövlət xərclərinin səmərəliliyini araşdırır. Xoşbəxtlik iqtisadiyyatına əsaslanan araşdırma, gəlirin xoşbəxtliyi yalnız həddə qədər artırdığını irəli sürən Easterlin Paradoksu (1974) kimi nəzəriyyələrə əsaslanır və dövlət müdaxiləsi (Pigou vs. Buchanan) ilə bağlı müzakirələri araşdırır. Dəyişən miqyasda gəlirlilik (VRS) ilə çıxış yönümlü DEA modelindən istifadə edərək, tədqiqat dövlət xərclərinin (giriş) daha yüksək xoşbəxtlik ballarına (çıxış) necə effektiv çevrildiyini qiymətləndirir. Əsas tapıntılar kəskin fərqləri ortaya qoyur: BƏƏ (1,0 səmərəlilik balı) və Səudiyyə Ərəbistanı (0,98) infrastruktur və sosial proqramlara strateji investisiyalar hesabına liderlik edir, Livan və Misir isə 1,0 bal toplamasına baxmayaraq, kənar kontekstləri əks etdirir (müvafiq olaraq, iqtisadi çöküş və qənaət). Orta və aşağı səmərəli ölkələr (məsələn, Tunis, İordaniya) institusional zəifliklərı vurğulayır. Tədqiqat belə nəticəyə gəlir ki, xoşbəxtlik təkcə xərclərin həcmindən deyil, idarəetmə keyfiyyətindən, şəffaflıqdan və məqsədyönlü ayırmalardan asılıdır. Tövsiyələrə fiskal nəzarətin gücləndirilməsi, xidmət keyfiyyətinin büdcə ölçüsünə üstünlük verilməsi və regional siyasət mübadiləsinin təşviq edilməsi daxildir. İqtisadi və rifah göstəricilərini birləşdirərək, məqalə MENA və onun hüdudlarından kənarda siyasətçilər üçün çərçivə təklif edərək, ictimai səadətə dövlət xərclərinin təsirini maksimuma çatdırmaq üçün institusional islahatların aparılmasını müdafiə edir.

Açar sözlər: *Data Envelopment Analizi, dövlət xərcləri, xoşbəxtlik, sosial xoşbəxtlik, büdcə ölçüsü*

Introduction

Happiness is a Vital element of human life and has long been a subject of inquiry among philosophers and scholars from diverse disciplines. While psychologists have traditionally explored happiness through surveys and well-being assessments, economists have only recently begun to engage with this area in a systematic way. Classical thinkers such as Aristotle, Bentham, Mill, and Smith recognized the centrality of happiness in human pursuits and incorporated it into their philosophical and economic reflections. However, as economics evolved into a more formalized and quantitatively driven discipline, definitions of well-being became increasingly narrow. Utility came to be viewed primarily as a function of income, and individual preferences were analyzed within the strict confines of monetary budget constraints, assuming rational decision-making behaviour (Graham, 2005).

The recent focus on happiness and its relationship with the economy has led to a relatively new trend in the field of economics that emphasizes the study and measurement of happiness and analyzes its impact on improving the quality of life by incorporating happiness metrics into economic decision-making processes and public policy formulation (Bruno & Gallus, 2012). Happiness economics consider as a branch of behavioral economics that analyzes the behavior of

individuals and the psychological and social factors that influence their economic decisions (Frey & Stutzer, 2022).

It combines many disciplines and encompasses numerous studies in philosophy, psychology, and sociology. It began with the seminal discovery of economist Richard Easterlin in 1974. The "Easterlin Paradox" states that there is no connection between increasing per capita income and the average level of happiness of individuals. According to this paradox, income affects well-being only at low levels of income. However, beyond a certain level, when all basic needs are met, income has a lesser impact on individual well-being. If an individual's income exceeds a certain threshold and their basic needs, such as food, shelter, and healthcare, are met, their happiness is related to other, non-material aspects (Gianluigi, 2013). Studies also indicate that increasing income increases individual happiness in developing countries with low GDPs, but in wealthy countries, income has little or no impact on happiness.

Research

As for happiness measures, researchers use various methods from psychology and sociology to measure and analyze subjective well-being, including life satisfaction surveys and psychological assessments. They also support them with objective indicators such as average income, employment status, education level, health, social relationships, and public policies.

However, mainstream economic theory assumes that higher income leads to higher levels of happiness or well-being. In scientific economics textbooks, it is generally assumed that total utility increases with income. This has been quantitatively linked to confirm the positive relationship between income and happiness by observing people's behavior to infer utility, based on the assumption that people's choices reveal their preferences. Therefore, economists and policymakers have focused on increasing the gross domestic product (GDP). However, basic indicators in traditional economics, such as GDP, unemployment rates, and inflation rates, do not provide a clear picture of the quality of life for individuals in a country. They ignore environmental damage, psychological impact, and social factors, and do not reflect the quality of education, volunteer work, and many other important factors in individuals' lives and well-being. In fact, several countries around the world rely on happiness metrics to inform development decisions. Bhutan adopted the concept of Gross National Happiness as a measure of development, replacing GDP. The United Arab Emirates established a dedicated Ministry of Happiness in 2016. New Zealand launched the National Happiness Index in 2018 to measure overall progress and quality of life. Within the framework of the Kingdom's Vision 2030, several initiatives have been created to promote well-being and happiness, such as the Quality of Life Program, Human Capacity Development, and National Transformation Programs.

Public spending on happiness is an interesting and increasingly important research topic, as evidenced by numerous studies, especially as governments and policymakers become more interested in alternative measures of GDP. This importance lies in the growing need for governments to understand the relationship between public spending (e.g., health, education, social welfare) and subjective well-being. It is an interdisciplinary field of research that combines economics, psychology, political science, and public policy. This importance raises several questions: Does public spending on social programs (e.g., unemployment, mental health) directly improve happiness? Or are some types of spending (e.g., green spaces, arts) more effective than others? Which types of government spending (health, education, infrastructure) have the greatest impact on life satisfaction?

1.State intervention in the economy and the happiness index: a theoretical approach:

The debate over state intervention in the economy goes back to the foundations laid by Adam Smith (1776) in his book “The Wealth of Nations,” where he distinguished between the role of the market in allocating resources and the necessity of state intervention in specific areas such as defense and justice (Smith, 2003/1776). in 1936, Keynes presented a new theoretical framework that justifies government intervention to achieve economic stability, considering that markets may be unable to achieve full employment without well-thought-out fiscal and monetary policies.

In the field of happiness and well-being studies, recent decades have witnessed a remarkable theoretical development in understanding the relationship between government policies and levels of subjective happiness. Whereas traditional economics measured well-being almost exclusively through material indicators such as gross domestic product (GDP), new schools of thought have emerged that emphasize the importance of non-material factors such as personal freedom, social cohesion, and institutional trust. This theoretical shift has led to the emergence of composite indices such as the World Happiness Index, which attempts to measure well-being more comprehensively.

Pigou (1920) developed the concept of "market failure," suggesting the need for state intervention to correct externalities (Pigou, 1920). Market failure, according to Pigou, can be explained when resources are not allocated efficiently within an economy, resulting in the ineffective use of those resources. This leads to market failure negatively impacting happiness levels due to its effects on life satisfaction, health, and psychological well-being.

In contrast, Buchanan and Tullock (1962) demonstrated, within the framework of "public choice theory," that government intervention can lead to "state failure" due to bureaucrats' pursuit of maximizing their own interests (Buchanan & Tullock, 1962).

For thus, Public choice theory does not focus directly on indicators of happiness, but rather examines how individuals make decisions in the public sector, assuming that they act based on their own self-interest. This theory, developed by James Buchanan, suggests that politicians and bureaucrats, like all individuals, act based on their own self-interest when making decisions, and this influences social outcomes.

Public choice theory provides a framework for explaining how political decisions are made and how they affect individuals and society. Although it does not focus directly on happiness, it can help improve social welfare and increase happiness by better understanding individuals' behavior in the public sector, providing them with better choices, prioritizing political decision-making, and increasing awareness of the limitations of policies. Public choice theory may thus improve social welfare through a better understanding of how public decisions are made, which can lead to more effective policies in achieving societal goals (Shaw, 2025).

Modern Theories: From Development to Happiness

The "developmental state theory" emerged through the work of Johnson (1982), who analyzed Japan's success in integrating government planning with market mechanisms (Johnson, 1982). This theory focuses on the role of the state in achieving economic and social development, while the happiness index measures the level of satisfaction and well-being experienced by individuals in a society. It can be asserted that there is a positive relationship between the two, as the economic development achieved by the developmental state may contribute to increased levels of happiness in society. The best example of this is that increased income and economic opportunities may lead to increased satisfaction and well-being among individuals (Karuna & Nagendra, 2022). In the last decade, the debate has shifted to examining the impact of economic policies on subjective well-being. Easterlin (1974) demonstrated that economic growth does not necessarily lead to increased happiness until a basic standard of living is achieved (Easterlin, 1974). Stiglitz (2019) also presented a multidimensional well-being measurement framework in his report "Beyond GDP" (Stiglitz, 2019). By seeking to understand the gap between theory and practice, Helliwell et al. (2022) in the World Happiness Report indicate that countries that combine effective governance with social spending rank highly on this index (Helliwell, Layard, & Sachs, 2022). However, Asian research (such as Khan's 2020 study of Malaysia) shows that different development models may achieve similar happiness across divergent paths (Khan, 2020). These contradictions call for, according to North (1990), a deeper understanding of the role of “institutions” as a link between economic policies and social outcomes (North, 1990).

2.Previous studies:

Many previous studies have a direct relationship with happiness in its relationship with state intervention in the economy in socio-economic fields, which were conducted recently, and we mention some of them:

Berggren and Björnskov (2023) explored whether happiness-led growth policies implemented in some countries could be effective in achieving improved economic well-being. Focusing primarily on European countries, the study found a strong positive relationship between government spending on services and higher happiness scores in Nordic countries. Government unemployment support reduces stress and increases life satisfaction by 22% compared to countries with liberal systems. The empirical results indicate that economic growth of 1% to 3% can be achieved through increased happiness. Furthermore, in developed countries, the positive impact of happiness is approximately four times greater than in developing countries (Berggren & Bjørnskov, 2003).

In a study on corruption and citizen happiness (2022), Changjun Fang (2022) used data from 133 countries to examine the impact of corruption on individual happiness. The study concluded that a 1% increase in corruption leads to a 0.3-point decrease in happiness. Among the study's findings is that increased government transparency contributes to increased public trust. One of its weaknesses is that the study did not differentiate between economic and social government intervention (Gupta & Mitra, 2022).

Alessandro Zito and Xiaohui Chen conducted a study on state intervention during the COVID-19 pandemic, which discusses the impact of various interventions on the dynamics of COVID-19 transmission and their associated economic consequences. Examining the variations in government policies, the study found that countries that provided direct cash transfers, such as Canada and Australia, recorded higher levels of happiness during the pandemic. In contrast, border closures as a government measure reduced happiness despite their associated health benefits. The research contributes to analyzing the balance between state intervention to protect health and its impact on psychological well-being.

In a study conducted by Wassim Wagih and Alexan Rizkallah, "The Impact of Fiscal Policy on Economic Happiness: Evidence from the Middle East and North Africa Region," this study aimed to analyze the relationship between fiscal policy (tax revenues and government spending) and economic happiness in 18 countries in the Middle East and North Africa (MENA) region during the period from 2012 to 2016. The study used Barro's (1990) endogenous growth model, applying several statistical methods such as ordinary least squares, fixed and random effects, and the generalized moments method to avoid the endogeneity problem. Among the most important findings of this study: There is a statistically significant negative relationship between non-distorting taxes and economic happiness. In contrast, there is no relationship between public spending (productive or non-productive) and economic happiness. On the other hand, there is a positive relationship between other revenues (non-taxes) and economic happiness (Wasseem & Alexan, 2023).

In a study conducted by Mahmut Unsal Shashmaz and Emre Shakir, "The Impact of Taxes and Public Expenditures on Happiness: Empirical Evidence from OECD Countries," they concluded that taxes collected for public expenditures have economic, social, and environmental objectives. Public expenditures financed by taxes cover a wide range of public spending. They may have some impact on the happiness of individuals and society, given that taxes are collected from individuals by force. At the same time, public expenditures are spent to meet the needs of the state and its economic development. In this study, the impact of taxes and public expenditures on happiness was investigated in 23 OECD countries over the period 2010–2017 using panel data analysis. Consequently, it was proven that taxes and public expenditures have a positive impact on happiness levels (Shashmaz & Shakar, 2020).

Considering the previous studies above, there are several fundamental and essential differences between them. First, there are notable differences in measurement methodology, such as the absence of a unified measure of happiness that combines subjective and economic aspects, in addition to the fact that most studies rely on pre-2020 data (before major economic transformations). Second, in terms of the geographical scope gap between studies, comparative studies are scarce between intervention models in developed and developing countries, in addition to an unbalanced focus (Europe accounts for 40%, and the Arab world accounts for only 20% of studies). Third, there is a time analysis gap: a lack of long-term studies exceeding five years on the

impact of policies, in addition to the limited analysis of successive crises (pandemic → inflation → wars). Also noted in these studies is the neglect of the mediating role of cultural and religious factors, while failing to measure the impact of government implementation quality in comparisons between efficiency and corruption, for example. Among the most important points of difference is that 80% of studies focused on social spending without a detailed analysis of the types of spending-productive spending (education, health) or non-productive spending (support, subsidies).

3.Comparative study using data envelopment analysis (DEA):

Data Envelopment Analysis (DEA) is a nonparametric method for evaluating the relative efficiency of decision-making units (DMUs) by comparing their inputs and outputs. Rooted in Farrell's (1957) efficiency concepts, DEA identifies efficient units—those maximizing outputs for given inputs or minimizing inputs for given outputs—and constructs an efficiency frontier as a benchmark. Efficiency scores range from 0 (inefficient) to 1 (fully efficient), with DEA accommodating multiple inputs and outputs without requiring price data or uniform measurement units (Cooper et al., 2007; Banker et al., 1984). Its flexibility allows application across diverse sectors, including public services where outputs are intangible (e.g., education, healthcare).

DEA models include variable returns to scale (VRS), which accounts for scale effects by imposing the constraint $\sum\lambda_j = 1$. An output-oriented VRS model maximizes efficiency (θ) subject to output and input constraints (Färe & Grosskopf, 2004). Key rules, such as ensuring sample size exceeds three times the sum of inputs and outputs ($Ss \geq 3(I+O)$) and limiting fully efficient DMUs to under one-third of the sample, safeguard model robustness (Mansouri, 2014). DEA's strength lies in providing actionable insights, such as efficiency targets, without restrictive assumptions about production functions (Benlebbad, 2024).

The mathematical formulation of the VRS (Variable Return To Scale) model, which assumes that resident units operate under the variable economies of scale hypothesis, is as follows:

Mathematical Formulation (Output-Oriented)

Objective:

Maximize: θ

Subject to:

1. $\sum_{j=1}^{n} \lambda_j * y_{rj} \geq \theta * y_{ro}$ for r = 1, ..., s
2. $\sum_{j=1}^{n} \lambda_j * x_{ij} \leq x_{io}$ for i = 1, ..., m
3. $\sum_{j=1}^{n} \lambda_j = 1$

Where:

- θ: Efficiency score of the Decision Making Unit (DMU) under evaluation
- λ_j: Weights assigned to each of the n DMUs in the comparison set
- y_{rj}: Output r of DMU j
- y_{ro}: Output r of the DMU under evaluation
- x_{ij}: Input i of DMU j
- x_{io}: Input i of the DMU under evaluation
- n: Number of DMUs in the comparison set
- m: Number of inputs
- s: Number of outputs

The objective function mentioned in the mathematical formula (1) aims to maximize the efficiency index θ for the decision-making unit π, under the constraint that any decision-making unit with a set of parameters u and v evaluated with the rest of the units must not exceed the value of any decision-making unit 1 (100%), which means full efficiency.

Study sample: The study includes many Arab countries in general, or what is known as a sample of North African and Middle Eastern countries, and its variables can be summarised in the following table:

countries	(I)Government spending, percent of GDP	(O)Happiness Index
United Arab Emirates	12,42	6,571
Bahrain	14,65	3,945
Algeria	17,93	5,329
Egypt, Arab Rep.	6,79	4,17
Iraq	15,66	4,941
Jordan	15,84	4,12
Lebanon	3,63	2,392
Morocco	18,11	4,903
Saudi Arabia	23,33	6,463
Tunisia	19,75	4,497

Public spending as a percentage of gross domestic product (GDP).

Government spending is one of the most important tools that influence the quality of life and economic and social well-being of individuals. Its importance lies in its role as an indicator of government priorities, whether in the areas of health, education, infrastructure, or social support. In this article, we will analyse the percentage of public spending as a percentage of gross domestic product (GDP) in a group of Middle East and North Africa (MENA) countries for 2023, link it to the happiness index, and provide recommendations to enhance the effectiveness of this spending in achieving societal well-being.

Based on the available data, countries in the region can be classified according to the level of government spending as follows:

Countries with Very Low Spending (less than 10%): Lebanon (3.6%): This low figure reflects the country's severe economic crisis, including a collapsing currency and declining public services. This sharp decline in spending is directly linked to the deterioration of the happiness index, as citizens suffer from a severe shortage of basic services such as electricity and healthcare. Egypt's spending also reached 6.8%. This level indicates austerity policies aimed at reducing the fiscal deficit, but it may lead to a reduction in the quality of public services, negatively impacting citizen satisfaction and happiness.

Medium-Spending Countries (10-20%): The United Arab Emirates (12.4%) and Bahrain (14.6%): Despite their lower spending ratio compared to some other countries, these two countries enjoy high levels of social welfare, attributed to their reliance on the private sector and indirect investments via sovereign wealth funds. Other countries, such as Iraq (15.7%) and Jordan (15.8%), are close to the global average (16.5%), but they face challenges such as displacement and refugees, which limit the impact of spending on improving quality of life.

High-Spending Countries (over 20%): Saudi Arabia (23.3%): The high spending is attributed to Vision 2030, which focuses on investing in infrastructure and social projects, contributing to an improved happiness index. On the other hand, in the far west: Tunisia (19.7%), Morocco (18.1%), and Algeria (17.9%): Despite the high spending, these countries still face economic and social challenges such as unemployment, indicating that spending alone is insufficient to ensure well-being without improving its efficiency.

Happiness Index:

The Happiness Index is a composite measure that reflects the quality of life and psychological and social well-being of individuals. In this analysis, we will review the 2023 Happiness Index data for selected countries in the Middle East and North Africa, with a particular focus on interpreting the disparities between them and linking them to each country's economic and social context.

a. Outstanding performing countries (index above 6): These countries include the United Arab Emirates (6.571) and the Kingdom of Saudi Arabia (6.463). The reasons for this high Happiness Index score are due to several factors, such as:

✓ Specific government investments in infrastructure and digital services (such as the "UAE Smart Government").

✓ Economic diversification that reduces dependence on the oil sector (especially in the UAE).

✓ Supportive social policies such as subsidized housing and youth empowerment programs.

b. Medium-performing countries (index 4.5–5.5): This category includes Algeria (5.329), Morocco (4.903), Iraq (4.941), and Tunisia (4.497). These countries share several indicators, such as weak human development indicators (high unemployment rates reaching 12% in Tunisia). In addition, political unrest (as in Iraq and Tunisia) has an impact on citizens' psychological stability. Similarly, Algeria and Morocco share similar spending (17.9–18.1%), but Algeria's happiness score is higher (5.329 vs. 4.903). This likely reflects Algeria's relative political stability despite economic challenges.

c. Low-Performing Countries (Index below 4.5): • Egypt (4.17), Jordan (4.12), Bahrain (3.945), and Lebanon (2.392):

Lebanon (2.392): The lowest score in the region, reflecting the comprehensive economic collapse and shortages of fuel and medicine.

Bahrain (3.945): Despite the rise in per capita income, the happiness index remained weak. This may be attributed to political and social pressures (such as the representation of the Shiite minority), as well as the high cost of living relative to wages.

As for Egypt and Jordan, they suffer from common challenges, such as austerity reform programs (especially in Egypt) and the repercussions of refugee crises (in Jordan).

Study results:

No.	DMU	Score	Rank	Reference set (lambda)
1	United Arab Emirates	1	1	United Arab Emirates
2	Bahrain	0,60	10	United Arab Emirates
3	Algeria	0,81	5	United Arab Emirates
4	Egypt, Arab Rep.	1	1	Egypt, Arab Rep.
5	Iraq	0,75	6	United Arab Emirates
6	Jordan	0,63	9	United Arab Emirates
7	Lebanon	1	1	Lebanon
8	Morocco	0,75	7	United Arab Emirates
9	Saudi Arabia	0,98	4	United Arab Emirates
10	Tunisia	0,68	8	United Arab Emirates

Data Envelopment Analysis (DEA), with an output orientation and variable returns to scale, revealed a clear disparity in the efficiency of government spending across the sample countries. The United Arab Emirates and Saudi Arabia topped the list of the most efficient countries, with the UAE scoring a perfect score of 1.0, while Saudi Arabia achieved 0.98. These results reflect the success of these countries in transforming financial resources into tangible development outcomes

that contribute to raising the level of societal happiness. Such success is achieved through the adoption of well-thought-out spending policies and a focus on infrastructure projects and digital transformation.

• The results also indicated that the UAE appeared as a benchmark among the group of references for 7 out of 10 countries, confirming its leadership in the development model and, on the other hand, the weak competitiveness of most other countries.

Some divergent results also emerged that merit consideration. Both Egypt and Lebanon scored a perfect efficiency score of 1.0, despite the economic and social challenges they face. In the case of Egypt, this result can be explained by the intense focus on rationalising spending under the economic reform programme, on the one hand, and the extensive use of international funding directed at specific projects, on the other. While Lebanon's results reflect exceptional circumstances linked to a comprehensive economic collapse, which makes any expenditure, no matter how limited, have a significant relative impact.

The results also revealed a clear disparity in outcomes and levels of efficiency.

• Highly efficient countries (0.9-1.0): the UAE, Saudi Arabia

• Medium-efficient countries (0.7-0.89): Algeria, Iraq, Morocco

• Low-efficiency countries (<0.7): Tunisia, Jordan, Bahrain

An analysis of the results indicates that institutional factors play a pivotal role in explaining the variation in efficiency, with countries with effective oversight systems and transparency in the management of public funds, the ability to prioritise spending, and a stable political and economic environment outperforming.

This study also provides quantitative evidence that achieving high levels of societal happiness depends not only on the size of government spending but also on the efficiency of its management and its allocation to priority sectors. The results also confirm that institutional reform must be the cornerstone of any strategy aimed at improving quality of life and raising levels of happiness in the countries of the region. Drawing from these prior findings, we can propose the following recommendations:

1. Strengthen ethical governance in public budget management
2. Develop integrated systems to measure government spending performance.
3. Focus on improving the quality of basic services rather than increasing spending.
4. Promote regional cooperation in exchanging best practices.

Conclusion

The study "Spending for Happiness: A Comparative Study Using Data Envelopment Analysis" provides a comprehensive examination of the relationship between government spending and happiness levels across selected Middle Eastern and North African (MENA) countries. By employing Data Envelopment Analysis (DEA), the research evaluates the efficiency of public spending in achieving higher happiness indices, revealing significant disparities among the sampled nations.

Key findings highlight that the United Arab Emirates (UAE) and Saudi Arabia emerge as the most efficient countries, with perfect or near-perfect efficiency scores. This success is attributed to their strategic allocation of resources toward infrastructure, digital transformation, and social programs, which align with broader development goals such as the UAE's Vision 2030. Conversely, countries like Lebanon and Egypt, despite scoring high in efficiency, face contextual challenges—economic collapse in Lebanon and austerity measures in Egypt—that complicate the interpretation of their results. Medium- and low-efficiency countries, such as Algeria, Iraq, Morocco, Tunisia, Jordan, and Bahrain, demonstrate the limitations of spending alone in enhancing happiness, pointing to the critical role of institutional quality, governance, and socio-political stability.

The study underscores that the size of government spending is less impactful than its efficiency and strategic prioritization. Institutional factors, including transparency, effective oversight, and political stability, are pivotal in translating expenditures into tangible improvements in well-being.

These insights challenge conventional assumptions that higher spending automatically leads to greater happiness, emphasizing instead the need for targeted, well-managed investments in priority sectors.

Recommendations for Policymakers:

Enhance Governance: Strengthen ethical governance and transparency in public budget management to ensure resources are used effectively.

Performance Measurement: Develop integrated systems to monitor and evaluate the impact of government spending on happiness and well-being.

Quality Over Quantity: Focus on improving the quality of basic services (e.g., healthcare, education) rather than merely increasing expenditure.

Regional Collaboration: Promote cooperation among MENA countries to share best practices and successful policies for enhancing happiness.

In conclusion, the study advocates for a holistic approach to public spending, where efficiency, institutional integrity, and strategic priorities are central to fostering societal happiness. Future research could expand the geographical and temporal scope to include more countries and longitudinal data, further exploring the interplay between cultural, religious, and economic factors in shaping happiness outcomes.

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Received: 12.05.2025
Approved: 19.08.2025