

Review of: "Digital UAE - a platform for demographic processes management"

Andrés Gómez¹

¹ Escuela Superior de Gestion Comercial y Marketing (ESIC)

Potential competing interests: No potential competing interests to declare.

ORIGINALITY

The paper presents novel and substantial insights pertaining to the demographic concerns and prospective remedies in the United Arab Emirates (UAE). The article examines the disparity between the indigenous population and migrants, highlighting its potential implications for national security. Additionally, it elucidates the several elements that have a detrimental impact on the birthing process, including inadequate access to stable employment, unfavourable economic conditions, prioritisation of women's professional advancement, and societal unrest. Furthermore, this article examines the effects of governmental initiatives aimed at promoting fertility rates and emphasizes the significance of aligning public policy measures in demography with those made in other economic sectors. The aforementioned findings make a valuable contribution to the comprehension of the demographic landscape in the United Arab Emirates (UAE) and offer valuable insights into prospective methods that may be employed to tackle the associated difficulties.

The current state of the art

This article exhibits an in-depth understanding of the pertinent literature within the discipline and appropriately references various scholarly sources. The text discusses scholarly research pertaining to a range of elements that have been found to have adverse effects on childbirth processes. These concerns include insufficient access to stable employment, unfavorable economic conditions, emphasis on women's professional advancement, and societal instability. Additionally, the article references several sources that discuss the influence of economic uncertainty on individuals' plans to have their first child. It also examines the correlation between declining birth rates and the resultant drop in the growth of the indigenous population. Furthermore, the article delves into the demographic concerns faced by the United Arab Emirates (UAE) and explores alternative ways to address these issues.

Nevertheless, certain noteworthy works have been overlooked in the report. As an illustration, the publication fails to cite the research conducted by Alkema et al. (2011) about probabilistic predictions of the total fertility rate [5]. This study has the potential to offer significant contributions to the field of estimating future fertility rates in the United Arab Emirates (UAE). Furthermore, it is worth noting that the publication lacks proper citation of Goldin's (2006) research, which examines the influence of women's job and education on the process of family formation [3]. This study has the potential to offer additional context and enhance comprehension of the various factors that influence birth rates.

Overall, while the study exhibits a strong awareness of the relevant literature, there are some notable works that should

have been added to deepen the analysis and provide a more comprehensive survey of the area. The user's text is incomplete and does not provide any information to rewrite in an academic manner.

METHODOLOGY

The methodology employed in this study encompasses a systematic and rigorous approach to investigate and analyse the research

The argument presented in the study is founded upon a suitable framework of theoretical underpinnings, conceptual frameworks, and ideas. This study incorporates the theoretical framework of demographic dynamics and explores the various determinants that impact birth rates, including employment, economic circumstances, and social variables. The study additionally integrates the utilisation of agent-based modelling to simulate and analyse demographic phenomena inside the United Arab Emirates.

The research or intellectual inquiry upon which the paper is founded has been meticulously developed. The Digital UAE model has been constructed by the authors, employing an agent-based approach and implemented on the Tianhe-2 supercomputer. The model takes into account a range of demographic variables, including but not limited to gender, age, emirate of residency, income, and reproductive behaviour. The authors have additionally performed scenario calculations to address demographic trends in the United Arab Emirates (UAE), including several scenarios such as disurbanization, stricter migration policies, preferential treatment for women, and rising healthcare expenditures.

The methodologies utilized in the study are suitable for addressing the research objectives. The utilisation of agent-based modelling enables a comprehensive examination of individual behaviour and interactions, hence proving to be highly pertinent in the investigation of demographic dynamics. The authors additionally employ statistical analysis and simulation methodologies to predict population dynamics and evaluate the consequences of various scenarios. The utilisation of a supercomputer for conducting computational experiments exemplifies the meticulousness and extensibility of the research methodology.

In general, the argument presented in the paper is firmly grounded in relevant theoretical frameworks and conceptual frameworks. Additionally, the research methodology and methodologies utilised in the study are suitable for investigating demographic trends within the United Arab Emirates.

RESULTS

The paper effectively presents the results, wherein the authors offer a comprehensive examination of the population growth prospects in the United Arab Emirates. This study illustrates that across all scenarios, long-term population growth is observed; nevertheless, the impacts of the policies employed exhibit substantial variations. In Scenario No.1, there is an observed population expansion of approximately 100 thousand individuals. Conversely, in Scenario No.3, characterised by preferences favouring women, a more substantial increase of 173 thousand persons is seen. Scenario 4, which pertains to the enhancement of medical treatment, has the highest surge, with a notable increment of 222 thousand individuals.

The conclusions effectively establish a cohesive link between the various components of the paper. The authors emphasize that the Digital UAE model has exhibited satisfactory outcomes and extensive potential for implementation in the domain of population management. The authors highlight the significance of utilising the agent-based approach in the management of demographic processes. They also stress the importance of integrating and connecting different social processes inside the model to enhance the accuracy of forecasts. The authors additionally explore the application of the SED model in conducting cross-country comparisons, examining migration patterns, and evaluating the effects of various scenarios on the economy of the United Arab Emirates.

In general, the findings are presented in a comprehensible manner, and the conclusions effectively provide a concise summary of the results and their implications for demographic management in the United Arab Emirates.

There exist several areas in which the paper could potentially be enhanced:

The work has the potential to offer a more thorough examination of the ramifications for research, practise, and society. While providing a cursory overview of the potential applications of the Digital UAE model, further exploration can be conducted to elucidate the practical utilisation of research findings in domains such as practical implementation, pedagogy, and policy-making. Furthermore, the present study has the potential to delve into the economic and commercial ramifications of the research, as well as its contribution to the existing body of knowledge within the discipline.

The paper has the potential to enhance the connection between theoretical concepts and practical applications. Although the paper adequately addresses the theoretical underpinnings and practical ramifications of the study, it might benefit from the inclusion of specific instances or empirical investigations to elucidate the practical application of the findings in real-life contexts.

The study may explore the potential constraints or difficulties associated with the practical application of the research findings. The examination of data restrictions, potential biases, and uncertainties related to the utilisation of the agent-based modelling approach employed in the study may be considered.

The report has the potential to delve into a more comprehensive analysis of the potential societal implications of the research. This encompasses an examination of the potential impact of the research findings and conclusions on public perceptions of demographic management and their implications for the well-being of persons residing in the United Arab Emirates.

In general, the study offers valuable insights; yet, there is potential for additional refinement and expansion of the consequences for research, practise, and society.

LANGUAGE USE

The article effectively lucidly presents its argument, employing specialised terminology that is suitable for the respective academic discipline. The authors present a thorough examination of the demographic issues encountered in the United Arab Emirates (UAE) and the probable ramifications of various scenarios on the increase of its population. The authors

employ pertinent concepts and theories, such as agent-based modelling and population dynamics, to substantiate their arguments.

Nevertheless, there exist certain domains in which enhancing the precision of articulation and enhancing the comprehensibility of the text could be advantageous. The work occasionally employs specialised terminology and acronyms without providing adequate clarification, thus impeding comprehension for readers who lack familiarity with the particular jargon of the discipline. The report references the "Digital UAE model" without offering a comprehensive elucidation of its constituents. Furthermore, the work may be improved by employing more coherent language structures and providing more succinct explanations in order to boost its readability.

In order to enhance the level of clarity in the text, the authors may want to contemplate the inclusion of additional definitions and elucidations pertaining to pivotal terminology and concepts. In addition, it is possible for them to streamline sentence structures and refrain from utilising an excessive amount of technical terminology or abbreviations. This approach would contribute to the paper's accessibility to a wider range of readers and improve the overall effectiveness of communication.