Determinants of the Intention of Iranian People to Accept the Changes of Social Welfare under the Imposed Sanctions

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Abstract

This research seeks to answer the question "what factors affect Iranian people's adaptation to the changes in their social welfare under the imposed sanctions?" To this end, a survey methodology based on two theories of Sanctions Acceptance Model (SAM) and Ulrich Beck's theory of risk society is employed to analyze the opinions of 135 respondents who are experts in the fields of economic sciences, economic resistance, economic development, and sociology of development. The results reveal that government organizations and institutions play a major role in assisting people in their adaptation to the conditions resultant from the sanctions. In the next step, the context of the sanctions was addressed in relation to the characteristics of the imposed sanctions. These characteristics, namely the target of the sanctions, the duration of the sanctions, the depth of the impact of the sanctions, threat or imposition of sanctions, and the unilateral or multilateral nature of sanctions play a major role in Iranian people's level of acceptance regarding the changes in their social welfare. Individuals are another important group whose mentalities and perceptions are affected by the imposed sanctions.

Keywords: Beck's Theory of Risk Society, Economic sanction, Iran, Sanctions Acceptance Model, Social welfare
JEL classification: I31; F51

1. Introduction

The United States and its allies have adopted the policy of imposing sanctions against Iran for several decades with the aims of compliance, subversion, deterrence, international symbolism, or domestic political signal as a deterrent and obstacle to sustainable growth and development (Lindsay, 1986, p. 153). The imposed sanctions on Iran include a range of boycotts, denial of access to international payment systems (particularly, SWIFT), threatening other countries to preclude their cooperation and trade with Iran, and sanctions on oil and gas exports together with political, scientific, financial, cultural, and sports sanctions.

The quantity and quality of Iranian's social welfare has been considered a major part of the sanctions imposed on Iran. Social welfare is a major indicator of human development, national power, and economic growth of a country. As Spicker (1988, p. 8) holds, "… the idea of "welfare" refers to "well-being", or what is "good" for people. Understood more narrowly, it can be taken to refer to the provision of social services - principally health care, housing, social security, education and social work". Considering this concept of social welfare which encompasses vast aspects of human life, any decrease in this index indicates the dissatisfaction of the society with the performance of the government, wider disparities of wealth between rich and poor, inequality of income distribution, a higher rate of unemployment, and more crimes.

The social welfare system in Iran currently stands at the development level and has improved since the Islamic Revolution of 1979. Vast reforms (for example, establishment of Primary Health Care (PHC) network and the High Council for Health Insurance (HCHI) to develop the system during 1980-2000) exerted positive impacts on the birth rates and mortality rates of the Iranian

population (Harris, 2017). Furthermore, the reforms in the social welfare system were introduced by the 2014 Health Transformation Plan (HTP) to support uninsured individuals and to improve health service quality. Compared to the corresponding systems in other countries, the current evaluation of the Iranian social welfare system designates this system as "developing". Despite its amelioration over the last decades, the system is still in need of improvement and expansion compared to similar systems in developed economies. If we consider the HDI (Human Development Index) as a popular indicator accounting for the quality of social welfare systems around the globe, the indicator's data obtained from the United Nations Development Program (http://hdr.undp.org/en) reveal that in four different factors of HDI, namely IHDI (Inequality-Adjusted Human Development Index), HDI, Gender Development Index (GDI) and Gender Inequality Index (GII), Iran's figures stand above the average scores.

Figure 1. HDI indexes in Iran and world, 2020
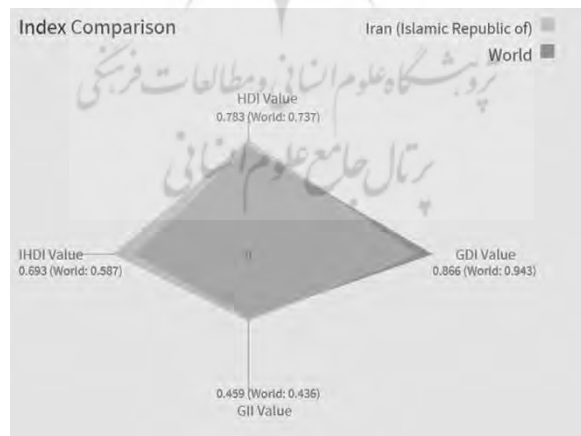
Source: Human Development Report (UNDP, 2020)

Comparing Iran's situation with other economies in the region such as Turkey, Saudi Arabia, and UAE (Table 1), it can be expressed that Iran scores lower in GNI per capita, internet users, and skilled labor force. Moreover, the employment to population ratio for Iran is only 39.6%, which is less than the corresponding percentage in Turkey, Saudi Arabia, and UAE.

Table 1. HDI dimensions in Iran and some other counties in the Asia, 2020

Dimension	Iran	Turkey	Saudi Arabia	UAE
Life expectancy at birth (years)	78.7	77.7	75.1	78
Expected years of schooling (years)	14.8	16.6	16.1	14.3
Gross national income per capita (constant 2017 PPP$)	12447	27701	47495	67462
Employment to population ratio (% ages 15 and older)	39.6	45.7	52.6	80.2
Homicide rate (per 100000 people)	2.5	2.6	1.3	0.5
Internet users (% of population)	70	71	93.3	98.5
Skilled labor force (% of labor force)	18	46.3	58.7	52.4

Source: Author compilation from the UNDP, 2020

A remarkable point is that social welfare in Iran has been influenced by the consequences of unprecedented hazards and shocks such as the imposed sanctions or the Covid-19 pandemic. Rodriguez and Atamanov (2021) found that the pandemic has reduced the purchase power of Iranian households, thereby augmenting income inequality among rural and urban populations. In this regard, harsh economic recessions and hyperinflation due to

the imposed sanctions against Iran were two driving factors exacerbating the pandemic's negative effects on social welfare in Iran. In another study, Madani (2021) expresses that the international sanctions imposed against Iran's economic activities have brought about collateral damage to economic welfare in the country. Rahmati, Ebrahimian and Madanizadeh (2021) have found empirical evidence demonstrating that the imposed sanctions on the trade of Iran with its neighbors have declined non-oil production and income levels, resulting in the devaluation of national currency and inflation in commodity markets. Therefore, it can be suggested that sanctions create uncertainty in the lives of the people who populate the target country. If we consider the negative effects of sanctions on Iran's social welfare as proven and accepted in previous studies, the question will be: 'What factors will affect people's adaptation to new transformations in their social welfare?'. To the best of the author's knowledge, there has been no previous research addressing this issue. Therefore, a survey methodology based on two theories of Technology Acceptance Model (TAM) and Ulrich Beck's theory of risk society are employed to answer the aforementioned question.

This study seeks to contribute to the existing literature on the topic from a number of aspects: i) modification of the well-known Technology Acceptance Model (TAM) to the Sanctions Acceptance Model (SAM) to evaluate Iranian people's perception of adoption to the imposed sanctions, and ii) employing a questionnaire analysis to evaluate the opinions of experts and scholars who specialize in economic development, economy of sanctions, economic resistance, and sociology of development.

This study has the following structure: In section 2, the gap in the literature is addressed. Theoretical background and research

methodology are delineated in section 3. Section 4 discusses empirical findings, and, finally, the concluding remarks and policy implications are presented in section 5.

2. Literature review

The impacts of sanctions on social welfare have drawn the attention of scholars. A vast number of studies consider the imposed sanctions as an exogenous shock that can transform the target country's economic structure and mechanisms, leading to an altered level of economic welfare in the sanctioned society (target of imposed sanctions). D'Antoni and Galbiati (2007) found that based on the signaling theory, the threatening sanctions may have harmful impacts on the target country and its economic relationships with other nations. Bagheri and Akbarpour (2016) reviewed the consequences of sanctions imposed by the West on the Russian economy and found out that the sanctions impacted the social gap and welfare in rural areas in Russia. Afesorgbor (2019) believed that economic sanctions against a country have significant impacts on both the target country and on the flow of the global economy. Wang, Wang and Chang (2019) studied the impact of economic sanctions on economy and found out that the imposed sanctions render exchange rates volatile in the target country, a negative sign for all economic sectors and particularly for the foreign trade of that country. More recently, using the panel fixed effect model for 22 sanctioned states, Fu, Chen, Jang and Chang (2020) revealed that the sanctions adversely affect people's lives in the target country. Felbermayr, Kirilakha, Syropoulos, Yalcin and Yotov (2020) argued that sanctions always generate adverse consequences for the target country and its main trading partners; however, in his view, most sanctions are neural in the long-run.

Attia, Grauvogel and Soset (2020) found that although imposed sanctions may be effective in the case of poor economies, political stability and economic integration of the target country may lower the intensity of the negative outcomes influenced by the imposed sanctions. Weber and Schneider (2020) compared the effectiveness of E.U. and U.S. sanctioning policies. The major results proved that the imposed sanctions of the EU are more effective that those by the United States due to the duration and types of sanctions. Bali and Rapelanoro (2021) investigated the impacts of E.U. sanctions against Russia and found that the impact degree of sanctions depends on the target sectors and the alignment of other nations with the sanctioning country. This important fact has been mentioned by Joshi and Mahmud (2018), who employed a network approach in their study and found that multilateral sanctions (collaboration among countries to impose sanctions against a target) are more effective that unilateral ones (when only one country imposes sanctions against a target).

A group of scholars have focused on the effectiveness and dimensions of the imposed sanctions against Iran. Dizaji (2014) employed the Granger causality approach to evaluate the impacts of sanctions against Iran. He believed that the sanctions severely affected the Iranian oil industry (as the major source of budget income and employment in Iran) which ensures higher standard of life. In another study, Majidi, Nedjat, Mohammadi, Jamshidi and Majdzadeh (2014) investigated the impact of sanctions on Iranian airlines. They reveal that the negative impact of sanctions on the accessibility and rational pricing of air-tickets has raised grave concerns among Iranian people. Shirazi, Azarbaiejani and Sameti (2016) and Ahmadi (2016) argued that the imposed economic sanctions changed Iran's export trade pattern, leading to a smaller

amount of foreign income for Iran's government and thus resulting in a lower level of social welfare. Rasoulinezhad (2016) analyzed the effects of sanctions and oil price shock on Iran's trade pattern with Russia. The findings demonstrated negative impacts of financial and non-financial sanctions on the trade volume between Iran and Russia. Aloosh, Salavati and Aloosh (2019) found that economic sanctions over the last decade have given a rise to income inequality and health expenditure in Iran, consequently increasing the population of vulnerable people in the country. Mahdiloo, Histani and Rezaei 1398 (2019 [A.D.]) studied the hazard of sanctions index for Iran and demonstrated financial sanctions' significant impacts on Iranian household health expenditure and income level. Rasoulinezhad (2019) and Rasoulinezhand and Sabri (2019) proposed the concept of geographical shift under the sanctions and provided evidence for Asianization and de-Europeanization of Iran's trade policy throughout the sanctions era. In another study, using the structural gravity theory, Felbermayr, Constantinos, Erdal and Yoto (2020) maintained that trade and welfare were two important economic sectors of Iran affected by the imposed sanctions. Ghasseminejad and Jahan-Parvar (2021) studied the impact of financial sanctions against Iran. The major findings prove that the most adverse impacts of these sanctions are on the profitability ratio of firms, which leads to a higher rate of unemployment and smaller final production. Samadi, Owjimehr and Halafi (2021) designated financial markets as the most influential channel of sanctions' impacts on Iran's economy, where fluctuations can decrease the motivation of investors and generally lead to lower living standards in Iran. Using a DSGE (Dynamic Stochastic General Equilibrium) model, Nakhli, Rafat, Dastjerdi and Rafei (2021) investigated how the economic sanctions affect Iran's economy. The empirical

results prove that the main consequences of sanctions against Iran are higher consumption expenditure and an increase in the general price of commodities and services.

Considering the aforementioned literature review, this study is the first to employ a questionnaire methodology to explore the impact of sanctions on the social welfare of Iranians using the theoretical background of TAM (Technology Acceptance Model) and the concept of risk society as put forth in Ulrich Beck's theory.

3. Theoretical background and research methodology

To explore the impacts of the imposed sanctions on Iran's social welfare, the modified Technology Acceptance Model (TAM) and Ulrich Beck's theory of risk society were employed. According to Beck's theory proposed in 1980s (Beck, 2000), it can be assumed that a society, namely a risk society, finds a systematic way or manner to deal with an unprecedented shock or hazard. Bennett (1996) argues that people's adaptation to risk and uncertainty leads to the emergence of a new social class. If we view sanctions as an unpredicted shock, then this theory helps to analyze the dynamics at work in a society where unprecedented risks are at play. In other words, the principles of this theory can highlight the links among social life, risk, and modernity. Curran (2018) believed that based on Beck's theory, a risk society has a different class of income due to the redistribution of wealth and changes in life standards in the face of particular hazards or shocks. Therefore, we expect that Iranian people will adapt to the evolutions and probable transformations in their social welfare resultant from the imposed sanctions.

Another theoretical framework in support of this research comes from the TAM (introduced by Davis in 1986) as it explains how people accept and use a technology (as a new and unknown factor). This theoretical approach fundamentally draws on the theory of Reasonable Action proposed by Fishbein and Ajzen (1975), maintaining that interpretive factors influence people's behavioral intention. The concept of attitude in this theory is generated by a set of beliefs and addresses people's rational evaluation of an unknown object.

In this study, we modified this model to the Sanctions Acceptance Model (SAM) with a view to evaluate Iranian people's perceptions of and adaptation to the imposed sanctions. Our proposed new model is outlined in Figure 2:

Figure 2. The proposed SAM model of research
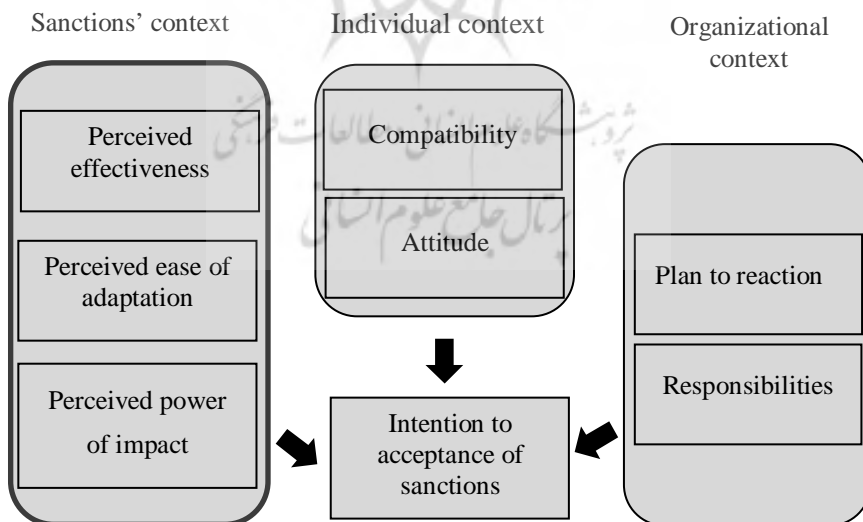
Source: Authors

According to Figure 2, the social welfare of the target country can be influenced by an unpredicted shock such as sanctions (Ulrich Beck's theory of risk society) with the context of sanctions as well as the individual and organizational context exerting an effect over people's perceptions of and adaptation to the sanctions. The individual context consists of compatibility (the degree of correspondence between the imposed sanctions and existing values of welfare) and attitude (people's perception of the positive/negative consequences associated with the imposed sanctions). The second context corresponds to the imposed sanctions and comprises of three variables, namely perceived effectiveness, perceived ease of adaptation, and perceived power of sanctions' impact. The organizational context accounts for the existence of an issued strategic plan to combat the negative impacts of sanctions on social welfare as well as the social responsibilities of organizations throughout the sanctions era.

Based on the theoretical pattern as illustrated in Figure 2, a questionnaire was prepared and distributed among experts and scholars of economic development, economy of sanctions, economic resistance, and sociology of development. The content validity and reliability of the variables were checked by a panel of 10 experts in economic sciences. Moreover, the internal consistency of the variables was examined by the Cronback alpha values for each variable in the proposed SAM model. The Cronbach alpha values are higher than 0.7, indicating acceptable reliability.

Table 1. Cronback alpha of variables

Variable	Symbol	Cronback α
Perceived effectiveness	PE	0.93
Perceived ease of adaptation	PEA	0.84
Perceived power of impact	PPI	0.72
Compatibility	COM	0.89
Attitude	ATT	0.76
Plan to reaction	PTR	0.75
Responsibilities	RES	0.84

Source: Authors' compilation from SPSS

Next, 221 questionnaires were sent to the experts via an online platform. The study questionnaire consisted of 35 items classified into 7 theoretical variables in the SAM approach. It should be mentioned that the respondents answered the questions on a seven-point Likert scale ranging from "strongly disagree" to "strongly agree". The final stage consists of regression analysis to study the impacts of each variable through the SAM approach. The conceptual framework of research methodology procedure is illustrated by Figure 3 as follows:

Figure 3. The research conceptual framework
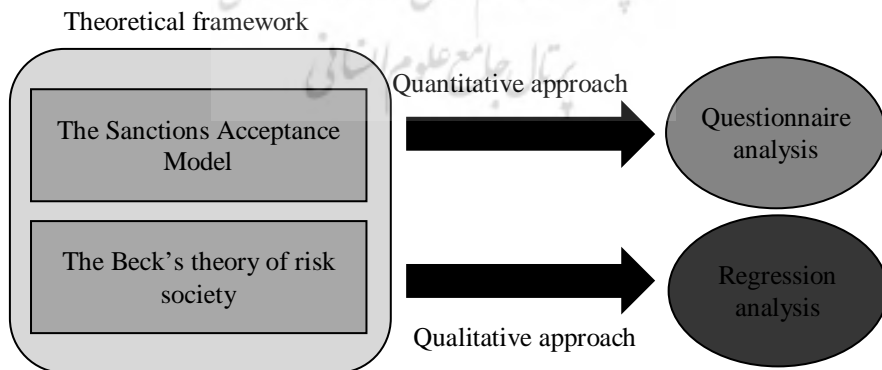
Source: Authors

4. Empirical findings

Among the 221 economic experts who received the questionnaire, 56 experts in economic development, 48 experts in economy of sanctions, 21 experts in economic resistance, and 10 experts in sociology of development responded. Overall, a response rate of 61.08% (135/221) was recorded. More than 92% of respondents were men. Approximately, 5.93% were under 40 years old, 90.3% were between 40-60 years old, and only 3.7% were over 60 years old. In addition, respondents had 19.44 years of experience in economic sciences. The characteristics of respondents are reported in Table 2 as follows:

Table 2. Demographic specifications of respondents

-	All (N, %)	Experts in economic development (N, %)	Experts in the economy of sanctions (N, %)	Experts in economic resistance (N, %)	Experts in the sociology of development (N, %)
Gender: Male Female	125(92.59%) 10(7.41%)	56 (100%) 0	44(91.66%) 4 (8.34%)	16(76.19%) 5 (23.80%)	9 (90%) 1 (10%)
Age: 30-39 40-49 50-59 >60	8 (5.93%) 105 (77.78%) 17 (12.59%) 5 (3.70%)	1 (1.78%) 45 (80.36%) 6 (10.71%) 4 (7.14%)	5 (10.42%) 37 (77.08%) 6 (12.5%) 0	1 (4.76%) 17(80.95%) 2 (9.52%) 1 (4.76%)	1 (10%) 6 (60%) 3 (30%)0
Years of experience	19.44	23.15	20.64	16.50	17.5
Educational grade: B.A. M.A. PhD.	2 (1.48%) 13 (9.63%) 120 (88.89%)	0 6 (10.71%) 50 (89.29%)	1 (2.08%) 3 (6.25%) 44(91.67*)	0 4 (19.04%) 17(80.95%)	1 (10%) 0 9 (90%)

Source: Authors' compilation from SPSS

Next, the descriptive statistics of variables in the SAM approach were analyzed. As reported in Table 3, all the variables and the dependent variable (Intention to accept sanctions) are positively correlated.

Table 3. Descriptive statistics of variables in the SAM approach

-	PE	PEA	PPI	COM	ATT	PTR	RES	IAS
Mean	4.95	5.64	5.08	4.39	5.86	5.30	4.97	5.40
Standard deviation	1.03	0.87	0.98	1.06	0.90	1.01	1.10	1.02
Correlation with dependent variable	0.77	0.58	0.71	0.52	0.70	0.43	0.64	1

Note: PE, PEA, PPI, COM, ATT, PTR, RES and IAS indicate perceived effectiveness, perceived ease of adaptation, perceived power of impact, compatibility, attitude, plan to reaction, and responsibilities and intention to acceptance of sanctions in social life, respectively.

Source: Authors' compilation from SPSS

In the final step, the regression analysis was carried out to find the coefficients of the variables. The results are reported in Table 4:

Table 4: Regression results

Variable	Unstandardized coefficients		Standardized coefficients	T	p-value
	B	Std. Error	Beta		
PE	0.71	0.030	0.142	2.400	0.01
PEA	0.23	0.034	0.504	9.600	0.00
PPI	0.64	0.031	0.144	2.931	0.02
COM	0.42	0.030	0.421	7.498	0.00
ATT	0.65	0.029	0.132	2.392	0.03
PTR	0.83	0.042	0.582	8.884	0.00
RES	0.25	0.037	0.429	6.541	0.04
R squared = 0.348 (p-value: 0.03), adjusted R squared: 0.328 (p-value <0.05) F : 33.483 (p-value <0.000)					

Note: PE, PEA, PPI, COM, ATT, PTR, and RES indicate perceived effectiveness, perceived ease of adaptation, perceived power of impact, compatibility, attitude, plan to reaction and responsibilities, respectively.

Source: Authors' compilation from SPSS

The findings from the regression approach, as reported in Table 4, show that all the variables are significant. In addition, PTR (the existence of a comprehensive plan, established by the government, to effectively response to the imposed sanctions), PEA (perceived ease of adaptation that accounts for the degree to which a person believes that adaptations to the new level of economic welfare [changed by imposed sanctions] would be free from additional costs or major obstacles), and RES (government responsibilities to strengthen economic welfare under the imposed sanctions) constitute the most influential variables explaining the impacts of sanctions on social welfare in Iran. To make a ranking list of top influential variables by using the coefficients listed in Table 5, the following pattern is represented:

Table 5. The ranking of variables influencing intention to acceptance of sanctions

Variable	Context	Coefficient	Rank
PTR	Organizational context	0.582	1
PEA	Sanction's context	0.504	2
RES	Organizational context	0.429	3
COM	Individual context	0.421	4
PPI	Sanctions' context	0.144	5
PE	Sanctions' context	0.142	6
ATT	Individual context	0.132	7

Note: PE, PEA, PPI, COM, ATT, PTR, and RES indicate perceived effectiveness, perceived ease of adaptation, perceived power of impact, compatibility, attitude, and plan to reaction and responsibilities, respectively.

Source: AuthorS

According to the obtained results, it can be stated that government organizations and institutions play a major role in

enabling the Iranian society to adapt to the conditions resultant from sanctions. Clearly, as earlier studies have revealed, economic sanctions lower the level of social welfare or alter the welfare indicators in a given society. In order to mitigate the negative impacts of sanctions, government institutions should attempt at establishing efficient plans and guidelines to unify the economic, political, social and demographic spheres of the country with a view to improve people's life conditions under the imposed sanctions.

As shown in table 5, if people obtain the impression that the government's institutions and organizations have clear and efficient programs in response to the negative effects of sanctions in the field of social welfare, they can more easily adapt to altered economic welfare situations under the imposed economic sanctions. Another important factor is related to the sanctions' context. The type, duration, and power of the imposed sanctions have a major role in the level of the acceptance of changes in social welfare by the Iranian people. If we consider two types of sanctions as either a mere threat or actually imposed, the latter leaves harsher impacts on the social life of Iranian people. Lowered income per capita, depreciation of national currency, an increased inflation rate, and income inequality are the main consequences of the recent sanctions (on Iran's nuclear program) which have adversely changed the level of social welfare in the country (Shirazi et al. 2016; Gharehgozli 2017; Altmann & Giersch 2021). The individual context also has a positive impact on the dependent variable. The improvement of individual context requires an efficient strategic plan of state including assigning executive functions to promote culture-building activities, effective utilization of social media platforms, job creation, and economic diplomacy on a regional and global scale.

5. Concluding remarks

In this study, we focused on the acceptance of changes in social welfare by Iranian people under the imposed sanctions through analyzing the influential factors on the adaptation of people to the changes in the prior levels of social welfare. To study this issue, this paper used the mixed approach that combines Ulrich Beck's theory of risk society and the proposed Sanctions Acceptance Model (SAM) to analyze the opinions of 135 respondents who were experts in the fields of economic sciences, economic resistance, economic development, and sociology of development. The multifarious contributions of this paper to the existing literature were: i) modification of the well-known Technology Acceptance Model (TAM) to the Sanctions Acceptance Model (SAM) to evaluate Iranian people's perception of and adaption to the imposed sanctions, and ii) employing a questionnaire analysis to evaluate the opinions of experts and scholars of economic development, economy of sanctions, economic resistance, and sociology of development. The results revealed that the proposed SAM model is applicable to the study of the impacts of an unprecedented shock faced by the social and economic structures in a given country. Moreover, in the case of sanctions' impacts and people's adaptation to the changes in social welfares, the analyses of the respondents' opinions proved that government organizations and institutions play a major role in assisting people in their adaption to the conditions resultant from sanctions. Also, the context of sanctions was found to be directly related to the characteristics of the imposed sanctions. The characteristics of the imposed sanctions, namely the target of the sanctions, the duration of the sanctions, the depth of the impact of the sanctions, the threat or imposition of sanctions, and the unilateral or multilateral nature

of sanctions, all play major roles in Iranian people's level of acceptance with regard to the changes in their social welfare. At the individual level, the mentalities and perceptions of people are involved in interpreting the consequences of the imposed sanctions.

The following practical policies are highly recommended to control/improve/affect these influential contexts to create more favorable situations with a view to raise Iranian people's level of acceptance in terms of the changes in their social welfare:

1. Iranian policymakers need to consider the power of media over altering the interpretation of the reality of sanctions and the probable impacts on various economic aspects. The media can help the policymakers to promote entrepreneurship among vulnerable people. Promoting entrepreneurship in small and medium-sized enterprises via TV and other audiovisual media can be addressed as an important factor in the field of job creation in the target country.

2. Preparing and efficiently implementing strategic plans in order to enhance economic resilience in Iran is another practical policy. The presence of the road map to take proactive measures in reaction to any unprecedented shock such as sanctions may help the country to increase national economic power and improve economic integration through regionalism and multilateralism, leading to a better standard of living and social welfare among the country's population.

This study has various limitations. First of all, our sample did not include vulnerable people in Iran. The authors believe that the presence of vulnerable people as respondents may better identify relationships between sanctions and social welfare. However, such a measure requires official information and data about vulnerable people including pensioners, illiterate and disabled persons,

financially bankrupt people, etc. Unfortunately, there is no specific institution in Iran that provides such data. Second, the sparsity of previous studies on the adaptation of Iran's people to the changes in social welfare caused by the imposed sanctions was another significant limitation of this study. Third, the study did not consider the impacts of the pandemic, a major challenge for many countries. Future studies can focus on extending the sample size of the respondents (for example, through drawing on the information retrieved from institutions such as Imam Khomeini Relief Foundation, State Welfare Organization of Iran, and Ministry of Cooperatives Labor and Social Welfare) and consider the role of the Covid-19 pandemic.

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154

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