# Identifying the Driving Forces Affecting the Development of the Government's Revenue Portfolio



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Abstract				

## Abstract

The present study aims to formulate policies for developing the government's revenue portfolio using a futures research approach. This research seeks to identify and explore possible futures and scenarios for the development of the government's revenue portfolio and strives to formulate strategies based on the most desirable scenarios. The study falls within the domain of futures research and is classified as qualitative research, utilizing the scenario-writing method. The statistical population of this study includes "experts in the fields of economics and policymaking" categorized into three groups: (a) academic elites, (b) economic managers and decision-makers, and (c) economic decision-makers in parliament. After selecting the experts, a structured inquiry process was conducted to collect their views regarding the government's revenue portfolio. Ultimately, after screening the variables, 84 variables were identified within eight dimensions as the primary macro variables affecting the government's revenue portfolio: legal factors, cultural and social factors, economic factors and sub-sectors, global and international factors, structural factors, banking and financial factors, science and knowledge-related factors, and political factors. Subsequently, using the cross-impact analysis (structural analysis) method through MICMAC software, the key influencing factors shaping the future state of the studied environment were analyzed. Based on this analysis, the key influencing variables affecting the development of the government's revenue portfolio include natural gas and petrochemical industries, agricultural economy, inflation rate, labor market conditions and employment levels, stock prices and stock exchange performance, free trade zones, tax return conditions and amounts, consumption tax rates, interest rates, nonfinancial government revenues, locomotive industry, heavy industries (steel, electricity, and automobile manufacturing), income tax rates, tariffs and various production and employment barriers, traffic economy, foreign investment inflows, housing market conditions and prices, textile industries, construction and urban development, unemployment rate, and government revenues from natural resources.

Keywords: Government revenue portfolio, futures research, policymaking, development.

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#### 1. Introduction

In economic literature, examining the causes of economic growth [development of the government's revenue portfolio] holds a significant position and has attracted the attention of many economists, leading to an extensive body of research on this topic [1]. Competent managers are those who proactively anticipate problems and have numerous alternative plans to address them in advance. These alternative plans can be designed as action and implementation scenarios [2-4].

The structure and composition of government revenues are among the most critical and vital topics in public sector economics. Tax revenues and revenues derived from natural resources constitute two primary types of government income. Compared to other sources of revenue, tax revenues significantly mitigate adverse economic effects. This source of income is superior to other domestic economic revenue sources due to its controllability. Some countries, such as Iran, possess substantial natural resources, and revenues derived from these resources account for a considerable and volatile portion of government income. The major drawbacks of resource-based revenues can be summarized as follows:

- 1. The inherent price volatility of these resources and their associated revenues
- 2. The non-renewable and depletable nature of these resources
- 3. The political, economic, and social consequences of excessive reliance on such revenues [5].

Global studies and research across different countries have demonstrated that the path to economic growth and development has become increasingly complex and prolonged. The considerable gap between Iran and developed nations exacerbates this complexity, making the path to progress even more challenging if neglected. Advancing along this path requires prudence, strategic thinking, research, education, economic and social reforms, and relentless effort. If Iran aims to establish itself as an active player in the global community and play a role in the international arena, it must enhance its intangible and economic capital at a pace equal to or faster than other nations. Consequently, ensuring societal progress for longterm survival and achieving the country's 20-year development vision is imperative [6].

Zhang et al. (2017) examined whether policymaking and the approach to policymaking directly influence total factor productivity (TFP) growth rates and whether policymaking impacts TFP growth depending on a country's distance from technological leaders. Their findings indicate that the greater the gap between a country and technological pioneers, the higher the potential for policymaking to enhance TFP growth through technology transfer from developed nations [7].

However, the policymaking process, which ultimately leads to innovation, is a complex and risky endeavor. As a result, companies may lack the willingness or capability to engage in policymaking [8]. This reluctance typically stems from several factors, which will be explored in detail throughout this study. In general, three fundamental reasons for this issue have been identified. First, the policymaking and innovation process generates spillovers [3, 9], meaning that other companies can benefit from the outcomes of a single company's policymaking efforts. Consequently, when a company invests in policymaking, it cannot exclusively capture all the benefits, as its activities inevitably influence external entities [10, 11]. Additionally, policymaking is an inherently risky activity. As a result, not all policymaking initiatives necessarily lead to innovation, which may discourage companies from pursuing specific projects [12, 13]. The third reason is that uncertainty in the outcomes of policymaking activities makes financing these initiatives challenging for companies. These factors underscore the necessity of government intervention in this domain (Koya et al., 2018).

Policymaking and economic policies encompass government actions and interventions aimed at achieving economic and social objectives to transition from the current state to a desirable one. Fiscal policy, in particular, affects the government's financial system in terms of revenues and expenditures, enabling the government to influence macroeconomic variables [6].

Public policies play a crucial role in the successes and failures of governments. When a policy fails, significant resources are wasted, and public confidence in the future is undermined. But why do government policies fail? Why do governments, despite possessing effective governance tools, often appear inefficient? It is evident that governments control a portion of national resources, are aware of existing challenges, and have the power to mitigate many of them. In other words, they are highly authoritative. However, this authority can sometimes be their downfall, as it fosters a sense of complacency. In such cases, governments may overlook domestic competition and instead focus their energy on international affairs and foreign adversaries. Perhaps the reason for some governments' advancements in military domains is their recognition of serious international rivals. They may progress in military capabilities but fail in domestic governance because they often disregard internal competition and neglect the strategic management requirements of their societies. Consequently, they fail due to their own missteps rather than external factors [14].

Thus, the development of the government's revenue portfolio is a critical issue in Iran's policymaking system. Despite the existence of various scattered policy tools within the country, this sector's contribution to revenue development remains minimal. A review of the literature indicates that for complex issues such as this, a diverse, coherent, and integrated set of policies and supportive tools must be devised, considering the interactive effects between these tools. This approach is best conceptualized as a wellstructured policy mix.

In recent decades, policy and innovation research has undergone significant transformation [15-19]. As the diversity of policy instruments has expanded and policymakers have increasingly focused on designing policy programs or packages involving multiple instruments to address specific problems or achieve particular goals, an important insight has emerged: policy instruments within a package do not operate independently [19-22]. In other words, implementing two policy tools simultaneously may produce synergistic effects or reinforce each other's effectiveness [23-25]. Conversely, implementing one tool might reduce the effectiveness of another. Therefore, considering the interactions and mutual effects of policy instruments is crucial when designing policy packages or, more comprehensively, "policy mixes." In the past decade, studies in various fields, such as energy policy, environmental policy, and transportation, have introduced different methods for assessing and incorporating the interdependencies of policy instruments throughout the policymaking process. Most of these methods have been qualitative and applied to policy mixes with a limited number of instruments. However, when numerous options exist, systematic approaches are necessary to overcome the limitations of human cognition. In this regard, the significance of the present study lies in developing a systematic quantitative method to account for policy instruments' interactive effects.

All these considerations indicate that economic programs, projects, and policies in Iran have not been particularly successful or satisfactory. Given the importance of economic policy and government revenues and the weaknesses of Iranian governments in economic policymaking, there is a pressing need for research on developing the government's revenue portfolio, particularly in the areas of policymaking and public policy. Additionally, analyzing government revenues in developing countries especially those reliant on natural resources—is of special importance. In this context, this study aims to identify the driving forces affecting the development of the government's revenue portfolio. Based on these discussions and considering the significance of the revenue portfolio, the research question is as follows: What are the driving forces affecting the development of the government's revenue portfolio?

## 2. Methodology

This study falls within the domain of futures research and is categorized as qualitative research, utilizing futures studies methods to conduct the investigation. In line with the research approach, the statistical population in this study consists of experts in the fields of economics and policymaking (management). Due to the vast scope of the subject and the necessity for experts to be specialists in the field, the selection of expert participants was conducted through consultation with supervisors and advisors. Consequently, three groups of experts were identified for participation in this research: academic experts including university professors in management and economics, economic managers and decision-makers in the government including officials from the Ministry of Economic Affairs and Finance, Central Bank, Planning and Budget Organization, Supreme Economic Council, and other state institutions related to the national economy, and economic decision-makers in Parliament, specifically members of the Economic Commission, Planning, Budget, and Audit Commission, Joint Budget Commission, and the Research Center of the Islamic Consultative Assembly.

For sample selection, a combination of purposive (judgmental) sampling and stratified sampling, assisted by the snowball sampling method, was employed. Initially, experts were categorized into three groups of governmental economic experts, academic economic experts, and parliamentary economic experts. Then, within each category, participants were selected using the snowball method. Based on this approach, the final number of experts in the study was determined as five governmental economic experts, five academic economic experts, and ten parliamentary economic experts. To identify the driving forces based on the critical uncertainties approach, the research followed a sequence of methodological steps, starting with the identification of the main topic, namely the government revenue portfolio. The next step involved a thorough review of relevant literature to identify the most influential factors shaping the national economy. Following this, key variables and driving forces were extracted from previous research, leading to the compilation of a comprehensive list of all identified driving forces. Subsequently, expert interviews were conducted to finalize the selection of driving forces, resulting in the preparation of a final, refined list of key forces impacting the government's revenue portfolio.

The Cross-Impact Analysis Matrix (MICMAC) method was employed to handle complex calculations related to cross-impact effects. This method involves identifying critical variables and components in the studied domain, followed by inserting them into a cross-impact matrix for analysis. Experts then determine the level of interaction between these variables and the domain under investigation. Variables in rows exert influence, while those in columns are influenced, meaning that row variables are independent driving forces, and column variables are dependent or affected variables (Rohi & Pormoun, 2019). The degree of interaction is measured using a numerical scale from 0 to 3, where 0 represents no influence, 1 indicates weak influence, 2 signifies moderate influence, and 3 denotes strong influence. If the study identifies n variables, an  $n \times n$  matrix is formed, where the interactions between variables are systematically recorded (Rohi & Pormoun, 2019).

Cross-impact analysis is a quantitative and exploratory method in futures research. Due to its high flexibility, it can be integrated with other foresight techniques, such as the Delphi method and scenario planning, making it a powerful tool for analyzing future events. This method effectively bridges the gap between quantitative and qualitative approaches in forecasting and trend analysis. Unlike many forecasting techniques that assume independence among variables, cross-impact analysis considers causal relationships and interdependencies, which is crucial for understanding complex emerging systems. The cross-impact matrix is designed to overcome limitations in traditional forecasting by capturing reciprocal influences between variables, improving the reliability of predictive models.

In MICMAC-based cross-impact analysis, the research process involves several key phases. First, it establishes a systemic understanding by assessing the stability or instability of the system. Then, it identifies indirect influences and recognizes variables that have secondary or long-term effects. Next, the study isolates key factors and driving forces that will be used in scenario development. A holistic analysis of the system follows, ensuring that no important variable is overlooked. Subsequently, destabilizing factors within the system are identified, helping to pinpoint elements that contribute to uncertainty and volatility. Finally, an environmental analysis is conducted to evaluate broader external influences on the system, allowing for a more comprehensive examination of future possibilities.

The output of the cross-impact analysis model reveals the interrelationships between variables, which MICMAC software visualizes through specialized graphs and charts. The software allows for the conversion of relationships into graphical representations, simplifying the interpretation of system dynamics. The software generates two primary types of matrices and corresponding charts, the first being the Direct Influence Matrix (MDI) and its respective graphs, and the second being the Indirect Influence Matrix (MII) and its associated graphs. In the initial graph, the software displays first-order direct relationships between variables. If second-and third-order interactions are to be analyzed, the matrix can be raised to the power of 2, 3, etc., revealing deeper layers of interconnections among variables.

The position of variables in the graph reflects their role within the system and their contribution to future transformations. Generally, variables are classified into four main categories. Driving variables have high influence but are less affected by others and are critical to the system's development. They appear in the upper-left quadrant of the graph. Dual variables are both highly influential and highly affected. They exhibit instability, as changes in these variables lead to significant reactions within the system. Positioned in the upper-right quadrant of the graph, these variables can be further divided into risk variables, located along the diagonal, and target variables, which are primarily dependent and are considered outcomes of system evolution. Dependent or outcome variables have high influence but exert little influence on others. These variables are positioned in the lower-right quadrant of the graph and are highly sensitive to the development of driving variables. Independent or isolated variables are those that neither significantly influence nor are significantly influenced by others. Positioned in the lower section of the graph, they have minimal connection to the system, as they neither hinder nor advance key dynamics within it.

This comprehensive analysis of driving forces within the government revenue portfolio provides insights for

policymakers regarding critical variables shaping the future economic landscape. The application of MICMAC structural analysis enhances decision-making by identifying pivotal elements in revenue development strategies. Through this structured methodology, the study effectively identifies and categorizes variables that shape economic policymaking, offering a systematic and quantitative approach to forecasting and strategic planning.

## 3. Findings and Results

In this method, experts and specialists in the field of the government revenue portfolio (budget and economy) were asked to provide their perspectives and judgments on the subject. The factors affecting the government revenue portfolio were classified into eight main dimensions, including legal, cultural and social, economic and subsectors, global and international, structural, banking and financial, science and knowledge-related, and political factors.

Table 1. Factors Affecting the Government Revenue	Portfolio Based on Primar	y Macro-Economic Varia	ables
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Dimension	Variables
Legal Factors	Economic development strategies, changes in financial and tax laws, intellectual and property rights, legal and judicial regulations, trade policies, policies supporting small and medium-sized enterprises, efficient legal system
Cultural and Social Factors	Self-confidence and self-reliance, social and political stability, consumerism and irrational spending, self-colonialism through the promotion of foreign goods, economic corruption, rent-seeking and harmful monopolies, legal violations and ambiguities, motivation for development, demand for government services, demographic changes, excessive growth of intermediary and brokerage activities, smuggling of goods, population growth and mortality rates
Economic Factors and Sub-sectors	Traffic economy, agricultural economy, government's contribution to economic growth, industrial production index, textile industries, major industries (steel, electricity, automobile manufacturing), locomotive manufacturing, construction and urban development, gas and petrochemicals, free trade zones, service sector, industrial sector, private sector's capabilities
Global and International Factors	Changes in international summit agendas, shifts in international relations, migration policies, economic sanctions, foreign trade volume, international laws and regulations, foreign direct investment inflows
Structural Factors	Demographic structure, national economic structure, government budget structure, women's education and participation, quality and efficiency of the banking and financial sector, labor market conditions and employment levels, housing market and property prices, economic data inconsistencies, tariffs and obstacles in production and employment, regional justice and territorial planning, inefficiencies in state-owned enterprises, tax refund conditions and amounts, transparency and targeting of consumer subsidies
Banking and Financial Factors	Inflation rate, unemployment rate, interest rate, exchange rate, oil prices, stock prices and market conditions, government debt levels, banking loans and credit facilities, income tax levels, consumption tax levels, non-financial government revenues, government revenues from natural resources
Science and Knowledge- Related Factors	Import-dependent nature of the educational, research, and technological system, institutionalization of scientific realism in decision- making, dynamic education system, education level and availability of specialized workforce, efficiency of the education system, advancements in knowledge and technology
Political Factors	Political independence of the government, existence of parallel decision-making centers and councils, multiplicity of social security institutions, intellectual competence of the governing body, political bias in budget planning, allocation of oil revenues to non-developmental foundations, absence of standardized criteria in the appointment of senior officials, non-economic role of the media and lack of free and fair information dissemination, expansion of government size leading to brain drain, inefficiencies in oversight and evaluation mechanisms and administrative corruption, inconsistencies in decision-making structures, alignment of public interests with government policies, centralization of resources in major cities leading to rural depopulation

The identification of primary macro-economic variables affecting the government revenue portfolio was conducted through an extensive review of existing studies and reports. Initially, relevant experts, specialists, and policymakers involved in the government revenue portfolio were selected. Following expert interviews and data screening, 84 key variables were ultimately classified into the eight identified dimensions.

Based on above results, a cross-impact or structural analysis was conducted using MICMAC software to determine the most influential factors shaping the future of the government revenue portfolio. The analysis used an  $84 \times 84$  matrix, where each factor's influence on others was

assessed through weighted scoring (ranging from 0 to 3). The results demonstrated the systemic interconnections between these factors, with a focus on identifying the most impactful variables.

The cross-impact analysis matrix was computed four times. This was based on MICMAC software's standard recommendation for achieving matrix stability. The matrix fill rate was calculated at 72.55%, reflecting the distribution and interrelation of macro variables. Table 1 summarizes the results of the initial analysis of the cross-impact matrix, showing the frequency of different influence levels assigned to the variables.

Matrix	Iterations	Zero	Weak Influence	Moderate	Strong Influence	Total	Evaluated	Matrix Fill Rate
Dimension		Influence	(1)	Influence (2)	(3)	Relationship	s	(%)
$84 \times 84$	4	1,937	2,507	1,700	912	5,119		72.55%

 Table 2. Initial Analysis of Cross-Impact Matrix Data (Direct Influence Matrix)

From the total 5,119 evaluable relationships in the matrix, 1,937 relationships scored zero, indicating no influence, 2,507 relationships scored one, indicating weak influence, 1,700 relationships scored two, indicating moderate influence, and 912 relationships scored three, indicating strong influence.

The optimization and validity of the direct influence matrix were evaluated through multiple iterations, confirming the high reliability and accuracy of the crossimpact analysis. Table 2 presents the validity levels for both influence and dependency dimensions across different iterations.

Table 3. Matrix Optimization and Validity in the Direct Influence Matrix

Iteration	Influence Validity (%)	Dependency Validity (%)
1	96%	99%
2	100%	100%
3	100%	100%
4	100%	100%
5	100%	100%

Following the four recommended iterations, the matrix reached 100% optimization and validity, confirming the high reliability of the questionnaire and responses. These results reinforce the robustness of the analysis and ensure that the findings accurately reflect the most influential variables affecting the government revenue portfolio.

For further examination of the system's environment, impact and dependency mapping was conducted, ranking variables based on their degree of influence and sensitivity to changes. These rankings provided deeper insights into the most critical factors shaping the future of the government's revenue structure, emphasizing those with the highest impact on economic stability and growth. In the cross-impact structural analysis method, using MICMAC software, two types of dispersion patterns are defined, known as stable systems and unstable systems. In stable systems, the dispersion of variables follows the shape of an "L", meaning that some variables have high influence, while others have high dependency. In other words, if the cross-impact analysis chart takes the form of an "L", it indicates a stable system. In such systems, three main categories of variables can be identified: highly influential variables (key factors), independent variables, and system output or result variables. The following section presents the impact and dependency mapping of variables, including the direct influence matrix (MDI), the indirect influence matrix (MPII).

Table 4	1.	Influence	and	Dependency	of	Variables –	Po	tential	Indirect	Effects
				1 2						

N°	Variable	Influence (Row)	Dependency (Column)	N°	Variable	Influence (Row)	Dependency (Column)
1	Foreign trade volume	61	130	43	Stock market prices	127	123
2	Economic corruption	117	107	44	Free trade zones	115	140
3	Industrial production index	58	135	45	Tax return conditions	128	127
4	Legal and judicial regulations	127	98	46	Demographic structure	116	67
5	Trade policies	120	100	47	Education level & skilled labor	120	61
6	Policies supporting SMEs	125	96	48	Economic structure	111	71
7	Sanctions	56	80	49	Consumption tax rate	130	120
8	Changes in international relations	54	64	50	Government debt levels	129	64
9	Political independence	88	59	51	Discrimination, rent-seeking	114	101

10	International laws & regulations	53	65	52	Changes in financial/tax laws	111	96
11	Oil prices	80	75	53	Territorial justice & planning	122	64
12	Import dependency in education/research	84	76	54	Interest rate	131	131
13	Exchange rate	84	75	55	Urban development	127	127
14	Multiplicity of social security institutions	84	74	56	Education system	123	62
15	Intellectual capacity of governing body	84	73	57	Inefficiency of state-owned enterprises	131	82
16	Institutionalization of scientific realism	113	72	58	Bank loans and credit facilities	124	66
17	Dysfunctional decision-making	111	66	59	Parallel decision-making centers	90	69
18	Dynamic education system	118	71	60	Intellectual property rights	108	91
19	Efficient legal system	91	83	61	Political bias in budget planning	131	88
20	Self-confidence & self-reliance	85	91	62	Demographic changes	107	76
21	Demand for government services	58	118	63	Population growth & mortality	132	80
22	Legal violations & ambiguities	57	126	64	Social & political stability	110	93
23	Gas and petrochemical industry	119	138	65	Resource centralization in big cities	127	98
24	Agricultural economy	127	144	66	Alignment of public & government interests	130	100
25	Consumerism & irrational spending	75	102	67	Changes in international summit agendas	54	86
26	Government expansion & brain drain	134	105	68	Motivation for development	49	94
27	Service sector	57	139	69	Non-financial government revenues	126	115
28	Immigration policies	55	144	70	Knowledge and technology	131	63
29	Excessive intermediation	60	148	71	Locomotive manufacturing	104	143
30	Misallocation of oil revenues	55	148	72	Core industries (steel, electricity, automobile)	113	150
31	Banking sector efficiency	54	145	73	Income tax rates	140	116
32	Industrial sector	57	141	74	Tariffs & employment obstacles	140	115
33	Inflation rate	127	132	75	Traffic economy	129	145
34	Women's education & participation	130	65	76	Foreign direct investment inflows	125	137
35	Economic development strategies	54	101	77	Lack of meritocracy in executive appointments	130	63
36	Self-colonialism (foreign product promotion)	71	106	78	Economic data inconsistencies	136	104
37	Labor market conditions	148	123	79	Housing market & property prices	151	117
38	Non-economic role of media	132	98	80	Private sector capabilities	61	158
39	Government's role in economic growth	46	89	81	Government budget structure	58	148
40	Transparency & targeted subsidies	138	90	82	Textile industries	125	155
41	Goods smuggling	63	82	83	Unemployment rate	121	137
42	Inefficiency in supervision & corruption	121	103	84	Government revenues from natural resources	125	123

In this table, the row values indicate the influence level of the variable, while the column values represent the dependency level of the variable.



Figure 1. Direct and Indirect Influence-Dependency Analysis of Variables

The summary output from the potential indirect effects matrix is presented in above figure. Based on this analysis, the most influential independent variables are identified, providing critical insights for strategic policy development in optimizing the government's revenue portfolio.

Independent Variables	Influential Variables	Extended Influential Variables	Dependent Variables	Strategic Variables
Sanctions (c08) Legal and judicial regulations (c04)		Political bias in budget planning (c61)	Foreign trade volume (c01)	Gas and petrochemicals (c23)
Changes in international relations (c07)	nges in international Trade policies (c05) tions (c07)		Foreign trade volume (c01)	Agricultural economy (c24)
Political independence of the government (c09)	Policies supporting small and medium-sized enterprises (c06)	Population growth and mortality rate (c63)	Industrial production index (c03)	Inflation rate (c33)
International laws and regulations (c10)	Multiplicity of social security institutions (c14)	Social and political stability (c64)	Demand for government services (c21)	Labor market conditions and employment rate (c37)
Oil prices (c11)	Institutionalization of scientific realism in decision- making (c16)	Resource concentration in major cities and rural depopulation (c65)	Legal violations and ambiguities (c22)	Stock market prices (c43)
Import dependency in education, research, and technology (c12)	Dysfunctional decision- making system (c17)	Alignment of public and government interests (c66)	Service sector (c27)	Free trade zones (c44)
Exchange rate (c13)	Dynamic education system (c18)	Knowledge and technology (c70)	Immigration policies (c28)	Tax refund conditions (c45)
Intellectual capacity of the governing body (c15)	Government expansion and brain drain (c26)	Territorial justice and planning (c53)	Uncontrolled expansion of brokerage and intermediation (c29)	Consumption tax rate (c49)
Efficient legal system (c19)	Women's education and participation (c34)	Lack of standardized criteria in executive appointments (c77)	Misallocation of oil revenues to non- developmental projects (c30)	Interest rate (c54)
Self-confidence and self-reliance (c20)	Non-economic role of media in free information flow (c38)	Economic data inconsistencies (c78)	Quality and efficiency of the banking and financial sector (c31)	Non-financial government revenues (c69)
Consumerism and irrational spending (c25)	Inefficiency in supervision and corruption (c42)	Economic corruption (c02)	Industrial sector (c32)	Locomotive manufacturing industry (c71)
Economic development strategies (c35)	Demographic structure (c46)	Transparency and targeted subsidies (c40)	Private sector capabilities (c80)	Core industries (steel, electricity, automobile manufacturing) (c72)
Self-colonialism (foreign product promotion) (c36)	Education level and skilled labor force (c47)		Government budget structure (c81)	Income tax rate (c73)
Government's contribution to economic growth (c39)	National economic structure (c48)		Tariffs and multiple obstacles in production and employment (c74)	
Goods smuggling (c41)	Government debt levels (c50)		Traffic economy (c75)	
Parallel decision-making centers and councils (c59)	Discrimination, rent-seeking, and harmful monopolies (c51)		Foreign direct investment inflows (c76)	
Changes in international summit agendas (c67)	Changes in financial and tax laws (c52)		Housing market conditions and property prices (c79)	
Motivation for development (c68)	Education system (c56)		Textile industries (c82)	
	Inefficiency of state-owned enterprises (c57)		Urban development (c55)	
	Banking loans and credit facilities (c58)		Unemployment rate (c83)	
	Intellectual property rights (c60)		Government revenues from natural resources (c84)	

## 4. Discussion and Conclusion

Based on the research approach and methodology, efforts were made to forecast and develop policies for expanding the government's revenue portfolio using a futures research approach and considering macro-economic variables. To achieve this objective, the relationships among factors influencing the expansion of the government's revenue portfolio were analyzed using MICMAC software, ultimately identifying the key drivers of revenue expansion. These key factors include gas and petrochemicals, agricultural economy, inflation rate, labor market conditions and employment levels, stock prices and financial markets, free trade zones, tax refund conditions and amounts, consumption tax levels, interest rates, non-financial government revenues, locomotive manufacturing, core industries (steel, electricity, and automobile manufacturing), income tax levels, tariffs and multiple obstacles in production and employment, traffic economy, foreign direct investment inflows, housing market conditions and prices, textile industries, urban development, unemployment rate, and government revenues from natural resources.

Based on these key factors, various strategies can be proposed to enhance the sustainability of government revenues, reduce dependence on traditional sources, and strengthen the macroeconomic framework.

Diversifying revenue sources can be an essential approach. The gas and petrochemical sector should be expanded by establishing appropriate infrastructure and strengthening energy diplomacy to increase exports of gas and petrochemical products. The use of modern technologies and the development of downstream industries can also generate higher added value for the economy. Core industries, such as steel, electricity, and automobile manufacturing, should be strengthened to boost national production and exports, which can generate new revenue streams for the government. Improving product quality and aligning with global standards can help expand export markets.

Reforming the tax system and enhancing tax efficiency is another critical approach. Consumption and income taxes should be revised and optimized to prevent tax evasion through transparency and process improvement. A smart tax system based on income levels and consumption patterns can ensure sustainable government revenue. Tax refund processes should be streamlined and expedited, improving public trust in the taxation system and encouraging greater compliance.

Improving employment conditions and the labor market is crucial. Small and medium-sized enterprises (SMEs), particularly in sectors such as textiles and food production, should be supported to increase job opportunities and expand the tax base through employment growth. Eliminating bureaucratic inefficiencies and reducing administrative obstacles in production and employment can stimulate economic growth and increase government tax revenues.

Developing financial markets and strengthening the agricultural economy can further support revenue stability.

The stock market and financial markets should be enhanced by improving financial infrastructure and ensuring transparency, which can attract more domestic and foreign investment. Implementing incentive programs for investors can further boost market growth. Strengthening the agricultural economy through financial support for farmers and modernizing agricultural infrastructure can increase production, exports, and government revenues.

Focusing on free trade zones and foreign direct investment (FDI) is another essential strategy. Infrastructure development in free trade zones and reducing export restrictions in these areas can attract both domestic and foreign investments. Offering investment incentives and tax exemptions to foreign investors can encourage capital inflows and generate new revenue sources for the government.

Enhancing the housing market and urban development policies is also necessary. Implementing urban development programs and affordable housing projects can stimulate the housing sector, leading to higher employment and government revenue through transaction taxes and related activities.

Adjusting interest rates and controlling inflation is another key measure. Monetary policies should ensure that interest rates are set optimally, balancing inflation control and encouraging investment in productive sectors. Reducing inflation through effective government spending management and liquidity control can enhance purchasing power and stimulate economic activity, ultimately increasing tax revenues.

Developing traffic economy and transportation infrastructure can further improve revenue generation. By modernizing transportation infrastructure and increasing efficiency, direct revenues from tolls and transportationrelated taxes can be increased. Improved transport efficiency can also enhance productivity across other economic sectors, contributing to a more stable revenue structure for the government.

Expanding non-financial government revenues and creating new revenue streams is another essential approach. The government can generate revenue from public services and digital technologies. For instance, monetizing government data and providing platform-sharing opportunities for the private sector can create new income sources. Utilizing underused government properties, such as real estate and land, for economic activities can also generate substantial revenues. Investing in locomotive manufacturing and strategic industries is vital for long-term economic growth. Developing the railway sector and establishing a domestic supply chain for locomotive components can reduce import dependency and create a sustainable revenue source for the government. Supporting strategic industries, such as steel, electricity, and automobile manufacturing, can not only increase employment and economic growth but also generate substantial long-term revenues.

Enhancing the textile and apparel industries, given domestic production capabilities, can be highly beneficial. Supporting local textile production and expanding export markets can reduce reliance on imports and generate additional government revenue. Providing financial support and technology upgrades for textile manufacturers can improve productivity and global competitiveness, boosting exports and economic growth.

Optimizing the natural resource-based economy and ensuring environmental sustainability is another crucial aspect. Through efficient resource management and sustainable environmental policies, the government can generate long-term and stable revenues from natural resources, such as mining and water resources. Sustainable development in natural resource management ensures that these resources remain productive in the long run. Investing in renewable energy sources, such as solar and wind energy, can reduce economic dependence on non-renewable resources like oil and gas, promoting environmental sustainability and economic stability.

Enhancing budget management and optimizing government expenditures is fundamental. Reviewing and reforming budgetary policies to reduce unnecessary expenditures can prevent resource waste and redirect funds toward productive sectors. Reducing budget deficits can also strengthen economic stability and prevent inflation. Implementing cost-cutting measures and improving the efficiency of public services through digitalization and modern technology can significantly enhance financial management.

Encouraging investment in knowledge-based industries is another important strategy. Supporting knowledge-based companies by providing financial and technical incentives can stimulate economic growth and generate new government revenues. Investing in emerging technologies, such as artificial intelligence, blockchain, and the Internet of Things, can create new economic opportunities and strengthen the government's financial base. Transforming the education system and training a skilled workforce is vital for long-term economic sustainability. Investing in education reform with a focus on practical and applied skills can produce a more skilled and productive workforce, ultimately enhancing economic productivity and tax revenues. Offering vocational training and apprenticeship programs aligned with labor market needs can increase employment and contribute to higher tax revenues.

Implementing effective policies to support traffic economy is also essential. Optimizing urban transportation infrastructure and traffic management services can increase government revenues through tolls and transportationrelated taxes, while also improving economic efficiency.

These proposed strategies can help the government expand its revenue portfolio by leveraging internal opportunities and capabilities, reducing dependence on limited and unstable resources, and strengthening the country's economic foundation. By implementing these policies, the government can ensure long-term financial stability, sustainable economic growth, and improved fiscal management.

## **Authors' Contributions**

Authors equally contributed to this article.

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## **Declaration of Interest**

The authors report no conflict of interest.

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## **Ethical Considerations**

All procedures performed in this study were under the ethical standards.

## References

- A. Herati, T. Mohammadi, and A. Shahmoradi, "The role of the government income portfolio in increasing tax equity," *Public Finance Journal*, vol. 8, no. 3, pp. 7-28, 2016.
- [2] S. L.-Y. Cheah and Y.-P. Ho, "Effective industrial policy implementation for open innovation: The role of government

resources and capabilities," *Technological Forecasting and Social Change*, vol. 151, p. 119845, 2020/02/01/ 2020.

- [3] M. Eyshi Ravandi, M. Moeinaddin, A. Taftiyan, and M. Rostami Bashmani, "Investigating the Impact of Investor Sentiment and Liquidity on Stock Returns of the Iranian Stock Exchange," (in en), *Dynamic Management and Business Analysis*, vol. 3, no. 1, pp. 40-52, 2024, doi: 10.22034/dmbaj.2024.2038046.1068.
- [4] A. Jafari, "Government income portfolio: Challenges and strategies," ed, 2019.
- [5] R. Vaez and M. Mohammadi, "A model for evaluating public policies in Iran (A study of the value-added tax policy)," *Prospects of Public Management*, vol. 29, no. 8, pp. 24-47, 2018.
- [6] A. Dehghan Herati, H. Mehrabi Basharabi, and A. Rahbar Dehghan, "Investigating the impact of fiscal and tax policies on agricultural trade in Iran," *Planning and Budgeting*, vol. 19, no. 1, pp. 111-128, 2014.
- [7] Y. Zhang, X. Zhao, Y. Zuo, L. Ren, and L. Wang, "The development of the renewable energy power industry under feed-in tariff and renewable portfolio standard: A case study of China's photovoltaic power industry," *Sustainability*, vol. 9, no. 4, p. 532, 2017, doi: 10.3390/su9040532.
- [8] A. Hamidi, A. Faghihi, and K. Teimoornezhad, "Identifying and Ranking Factors Affecting Policymaking of Public Administrators' Education," *Public Management Researches*, vol. 16, no. 62, pp. 63-96, 2024, doi: 10.22111/jmr.2022.42740.5807.
- [9] J. Dai, Z. Ahmed, R. Alvarado, and M. Ahmad, "Assessing the nexus between human capital, green energy, and load capacity factor: policymaking for achieving sustainable development goals," *Gondwana Research*, vol. 129, pp. 452-464, 2024, doi: 10.1016/j.gr.2023.04.009.
- [10] H. Golabchi, M. Kiaee, and M. J. Kameli, "Designing a Superior Service Delivery Model in Education to Enhance Public Satisfaction," (in eng), *Iranian Journal of Educational Sociology*, Research Article vol. 7, no. 1, pp. 189-197, 2024, doi: 10.61838/kman.ijes.7.1.18.
- [11] S. H. Kazemi, E. Ahmadi, and M. Mortazavi, "Obstacles and Opportunities for Effective Implementation: A Case Study of COVID-19 Crisis Policy in Kurdistan Province," *dpmk*, vol. 13, no. 4, pp. 528-545, 2024, doi: 10.32598/DMKP.13.4.774.1.
- [12] R. R. Bhandary and K. S. Gallagher, "What drives Pakistan's coal-fired power plant construction boom? Understanding the China-Pakistan Economic Corridor's energy portfolio," *World Development Perspectives*, vol. 25, p. 100396, 2022, doi: 10.1016/j.wdp.2022.100396.
- [13] Z. Ying, Z. Xin-gang, J. Xue-feng, and W. Zhen, "Can the Renewable Portfolio Standards improve social welfare in China's electricity market?," *Energy Policy*, vol. 152, p. 112242, 2021, doi: 10.1016/j.enpol.2021.112242.
- [14] K. Uno, The history of Japan's economic development: The sources of private sector dynamics and political competence, Translated by N. Pourrostami ed. Tehran: University of Tehran, University Press Institute, 2020.
- [15] A. Ali, F. A. Alsulaiman, K. Irshad, M. Shafiullah, S. A. Malik, and A. H. Memon, "Renewable Portfolio Standard from the Perspective of Policy Network Theory for Saudi Arabia Vision 2030 Targets," in 2021 4th International Conference on Energy Conservation and Efficiency (ICECE), 2021: IEEE, pp. 1-5, doi: 10.1109/ICECE51984.2021.9406286.
- [16] S. M. Al-Kahtani, "Environmental Responsibility, Strategy, and Competitive Advantage: Mediating Effect of Environmental Innovation," *International Journal of Energy*

*Economics and Policy*, vol. 14, no. 3, pp. 316-331, 2024, doi: 10.32479/ijeep.15482.

- [17] J. Keim, "Depolarizing innovation: Dynamic policy implications for entrepreneurial ecosystems in second-tier European regions," *Junior Management Science (JUMS)*, vol. 9, no. 1, pp. 1211-1240, 2024. [Online]. Available: https://www.econstor.eu/bitstream/10419/290633/1/1884465 242.pdf.
- [18] R. K. Kumar *et al.*, "Innovation dynamics within the entrepreneurial ecosystem: a content analysis-based literature review," *Humanities and Social Sciences Communications*, vol. 11, no. 1, p. 366, 2024/03/06 2024, doi: 10.1057/s41599-024-02817-9.
- [19] P. Ordóñez de Pablos, "Editorial: "Digital transformation, innovation and competitiveness: some insights from Asia"," *Journal of Science and Technology Policy Management*, vol. 15, no. 1, pp. 1-5, 2024, doi: 10.1108/JSTPM-01-2024-222.
- [20] E. Seifi, A. Ahmadi, and M. Moazzami, "Identifying the dimensions and components of the application of new technologies in the fourth generation university," (in en), *Management and Educational Perspective*, vol. 5, no. 4, pp. 24-51, 2024, doi: 10.22034/jmep.2024.426783.1282.
- [21] Z. Sepidbar, Y. Mohammadzadeh, and V. Nikpey Pesyan, "Analysis of the effect of entrepreneurship index on employment in Iranian provinces: Spatial econometric approach," (in eng), *The Economic Research (Sustainable Growth and Development)*, vol. 24, no. 1, pp. 285-311, 2024, doi: 10.22034/24.1.285.
- [22] X. H. Song *et al.*, "Impacts of renewable portfolio standards on multi-market coupling trading of renewable energy in China: A scenario-based system dynamics model," *Energy Policy*, vol. 159, p. 112647, 2021, doi: 10.1016/j.enpol.2021.112647.
- [23] N. P. Nguyen and E. Mogaji, "Universities' endowments in developing countries: The perspectives, stakeholders and practical implications," in *Re-imagining Educational Futures in Developing Countries*: Palgrave Macmillan, Cham, 2022, pp. 261-282.
- [24] A. Perdana and N. B. Mulyono, "Purchasing Strategies in the Kraljic Portfolio Matrix-a Case Study in Open Pit Coal Mining," *Indonesian Mining Professionals Journal*, vol. 3, no. 1, pp. 45-58, 2021, doi: 10.36986/impj.v3i1.41.
- [25] A. A. Pour Ezzat, A. H. Behrouz, F. Dezhpasand, and M. Amiri, "A pathology of budgeting for research and technology in Iran using the Fuzzy-Analytic Hierarchy Process method," *Innovation Management*, vol. 8, no. 4, pp. 85-122, 2019.