# Designing Ex Ant Evaluation of Policy Model

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## **Abstract**

Today, symbol of better policy and more smart is ex ant evaluation policy that Models, methods and tools inform policymakers and stakeholders and ultimately improve the quality of public policy.

In this article, ex ant evaluation policy model Based on future-oriented approach by using the Delphi technique and the experts in the disciplines and various areas in Iran has been designed. This model can be used as a methodological framework in different disciplines, the causal, model consists of six stages Definition of policy context, The definition of possible policy scenarios and screening ,Rational model of probable policies, Analyze the impact of probable policies and compare them, Identify key indicators and measures of progress and advise policy makers and stakeholders feedback information and development answers future of and has functions; informing, communication between policy makers and stakeholders to improve the capacities of policy making. Resulting in improved quality and enhance the cohesion policy.

**Keywords:** policy, alternatives, ex ant evaluation policy

## 1. Introduction

Decision making on selecting a policy implies opportunity cost: the cost of selection between alternative options and the cost of inefficient performance or the lack of the policy (in practice). Policymakers should select the best policy among different Proposals which create the highest value. Selecting the policies which pursue real needs I practice would yield to optimized allocation and consumption of national resources (Staronova, 2007). In this process, what is emphasized more is ex ante evaluations or impact assessments (Wersechorn & Gestel, 2009).

In selecting policy options and conducting relevant activities, one should note that only those policies are effective which would yield into optimized results (Starnova, 2007). What flows as better interventions in European experiences (Weiner, 2006) and is seen as ex ante evaluations of policies in future dialogues theoretically is emanated from a critical thinking method in order to get rid of "threshold problem" in which future is a blocked way, a dead-end, hidden, out of sight and access and, as a result, out of thought and is ignored due the possibility and an understanding full of innovation on conditions, re-conception aspects, thought modification and stepping toward intentional outcomes emanated from smart selections (Khazaei, 2013).

Critical analysis on literature indicates that the perspective of models, methods and tool of ex ante evaluation policy is faced with deficiencies. Although there are varied tools on ex ante methods, they are confronted with criticism (Gestel, 2007). It seems that such tools are misused by authorities; for instance, only desired option is considered via this tool (UK National Auditing Organization, 2004). (Note 1)

Besides, methods are often ambiguous and tools are often used after radical formulation of new policy or law and they are traditionally (initially) focused on impacts that are quantitative and financial.

Relevant literature is highly focused on the concept of ex ante evaluation policy. Most publications are the article in a journal which emphasize on certain elements of ex ante evaluation process and reference books are rare in this regard. They insist on providing practical guidelines to conduct evaluation (Renda, 2006). They pay no attention to background and basis of policies, philosophy of different laws and better policies (Beldin, 2005) or are just designed for ex ante evaluation policing EU (Majon, 1996). Therefore, Weiner suggested the expansion

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(development) of mode, tools and methods (Weiner, 2006).

Although there are varied tools on ex ante evaluation methods (Gestel, 2007), they do not consider different models like EC (2005) and OECD (2007) or Possible side-effects and were generally observing the lack of imagination on intervention alternative ways (Wersechorn & Gestel, 2009; Lianos & Fazekas, 2014).

However, by Futures Studies, ex ante evaluation policy has made it possible to think about future by considering language, concepts and metaphors inducing such concepts as "alternatives" (Khazaei, 2013) used to examine probability of different plans and policies (Khazaei, 2013). It also studies uncertainty, discontinuities and ambiguities on future in policies.

In Iran, studying evaluation and ex ante evaluation policy indicates that policy evaluations are not considered by organs as they should (Ex Ante Report by Expediency Council, 2009). Therefore, "ex ante evaluation policy" needs improvement and promotion.

To answer current theoretical gap as well as identified problem, it needs to explanatory variables and their relationships in ex ante evaluation model by a Futures Studies approach. However, what are proper variables for ex ante evaluation policy model? What is proper model to explanatory the relationships between these variables?

# 2. Research Questions

- (1) What are types and definitions of ex ante evaluation policy?
- (2) What are the variables of ex ante evaluation model?
- (3) What is the proper model to explanatory relationships between these variables?
- (4)Is mentioned model credible in policymaking space and futures studies?

## 3. Ex Ante Evaluation Policy

When evaluation definition is clarified, reviewer designs and selects evaluation policy model consequently (Emami & Astarian, 2011).

According to Hirkpatrick and Parker (2007), ex ante evaluation policy is conceived as a tool which helps to analyze public policy and to select public policy alternatives (Hirkpatrick & Parker, 2007). According to OECD, ex ante evaluation policy is "an analytical approach based on information aimed at evaluating the costs, outcomes and impacts of public policy planned tools" (OECD, 2001). Likewise, ex ante evaluation policy is "a set of logical steps pursued in the time of drafting public policy and a process which prepares evidences for political decision makers based on advantages and disadvantages of public policy options through potential impacts of evaluation (economic, social and environmental)" (EC, 2009). Stranova (2007) emphasizes on instrumental aspect of ex ante evaluation policy and asserts: it is an instrument which explores interests, costs and possible impacts of a policy (either new or changes), provides decision makers with valuable applied information and draws a framework by which policymakers can examine possible options and outcomes of their decisions (Bushehri et al., 2013; Cited by Stonova, 2007).

DIADEM that has worked on practical experiences of ex ante evaluation policy in EU member states defines impacts evaluation:

"A systematic, mandatory, and consistent assessment of aspects of social, economic, or environmental impacts such as benefits and/or costs, affecting interests external to the government, of proposed regulations and other kinds of legal and policy instruments, to a) inform policy decisions before regulation, legal instrument, or policy is adopted, or b)assess external impacts of regulatory and administrative practices, or c) assess theaccuracy of an earlier assessment." (Better Laws European Networks, 2006; Radley et al., 2006).

In their book, Verschurn and Gestel (2009) reviewed different definitions on ex ante evaluation and studied experiences in different fields and levels (national EU) and selected below definition for evaluation:

"Future oriented research which pursues expected impacts and side effects of new policies in formulated and structured trends through interaction with stakeholders which leads into composing a report to improve public policy quality like a research which includes a study on possible impacts and side effects and alternatives never paid attention by politics" (extracted from ex ante evaluation definition or Netherland's Courts inspection report, 2000).

Table 1. The emphases of ex ante evaluation policy definitions

Raw	Author/organization	Year	Emphases
1	OECD	2001	- Logical analysis approach
			- Emphasis on public policy tools
			- Emphasis on costs, outcomes and possible impacts
2	DIADEM	2006	- Structured, necessity and compatibility
			- Integrated study of economic, social and environmental impacts
			- Utilization for external stakeholders, proposed policies and political tools
3	Kelin and Parker	2007	- Instrumental
			- Public policy alternatives
4	Stranova	2007	- Instrumental
			- Studying a new or changed policy
			- Possible options and decision outcomes
5	EU	2009	- Logical steps
			- Emphasis on proposal and public policy options
			- Integrated study of potential impacts (economic, social and environmental)
6	Verschurn and Gestel (2009): from the	2009	- Future oriented research
	Netherland's Courts inspection report		- Based on policy oriented approach
			- A method and set of methods to integrate available information
			- Results lead into specify policy alternative and superior plans

## 4. Types of Ex Ante Evaluation Policy

Ex ant evaluation policy typology in relevant literature is conducted either by "the analysis field" or "a step of policymaking process in which impact evaluation is executed" and "ex ante evaluation development" and "the nature of methodological approaches".

Considering the analysis field, we have business, social, economic, environmental and integrated impact evaluation (Matia & Dugaru, 2011).

EC (1986) defined "business impact assessment system" (Rendal, 2006). Such kind of evaluation highly emphasizes on proposed policy on business enterprises and ignored both environmental and social effects. To the same reason, it was criticized and caused the orientation of ex ante evaluation in European Commission to generate new initiatives (Matia & Dugaru, 2011) and it yielded to common ex ante evaluation policy which included:

Social impact assessment (UNOD program in Europe and Central Asia, 2011; Impact Evaluation International Association, 2011). Policy should not be seen only as a prescribed activity on social impacts and a part of integrated impact evaluation; rather it should be considered as methodology or independent tool for ex ante evaluation interventions (Matia & Dugaru, 2011). Economic impact association consists of macro and minor aspects of economic impact (Matty, 2003) while environmental impact assessment which draws effects and levels that a public policy alternative can have on environment (Bridges et al., 2006).

2002 was the year of starting the integration of new steps created by EC in this field resulted into "integrated impact assessment model" became compulsory after one year (2003). EC integrated types of ex ante evaluation policy and called it as integrated impact assessment. At the first glance, one should say that new integrated impact assessment model is designed by lessons learnt from international activities it was more complete and more effective theoretically (ibid: 6).

This mode obliges all new activities to evaluate economic, environmental and social impacts and in 2005, EC published its updated version called "detailed impact evaluation designing" which provided a detailed explanation on below items:

- 1. Methodology and impact evaluation procedures
- 2. Questionnaire to study the impact of different policy alternatives
- 3. Well known measures to evaluate impact development
- 4. Minimized standards for consultation (ibid: 4).

Depending on "public policymaking step" in which impact evaluation is undertaken; we can distinguish types of policy evaluation (Hirkpatrick & Parker, 2007). Which includes summative evaluation or ex –post evaluation, process and ex ante evaluation (Presidency Science and Technology Deputy, 2008).

Ex ante evaluation policy is an activity which starts in the beginning of policymaking process while ex post evaluation policy is an activity during and after public policy execution which measures the realization of results and identifies deviations from designed goals, real time and additional costs of resources and other factors. The aim of ex post evaluation is not only to identify mistakes but also to provide proper prescriptions for future operations (Matia & Dugaru, 2011).

Concerning above typology, authors believe that it may create ambiguities since the final categorization can be interpreted as refining and evaluation of public policy as a step of policymaking process (Matia & Dugaru, 2011).

Another discussion is that in ex ante evaluation whether we address goal alternatives, problem or options that lead into selecting among public policy alternatives. Or we select among current political tools.

Furthermore, Romanian Laws elucidate that ex ante evaluation policy can be conducted in three different steps of policymaking:

- 1. Formulating the public policy;
- 2. Preparing the public policy instruments, more specifically the drafts of law;
- 3. Evaluation of public policy. (Matia & Dugaru, 2011).

Thus, ex ante evaluation policy can be discussed in at least two steps. The first step is impact ex ante evaluation policy aimed at public policy alternatives evaluation which includes a policy draft and is called public policy alternatives evaluation. Often, the second impact policy is conducted after approving a public policy draft for execution step in the time preparing draft laws. Draft laws are formulated when the solution is provided through policy proposal and leads into the introduction of new policy laws, rules and tools (Matia & Dugaru, 2011).

Moldavian government's ex ante evaluation public policy methodology handbook (2009) believes that the domain of public policy evaluation depends of problem complexity while impact estimation depends on time, resources and competencies available for authorities. In this book and by considering development extent, ex ante evaluation policy is defined by two impacts ex ante evaluation namely "general impact" and "extended impact" (Moldavi, 2009).

Considering the importance of "methodological approaches nature", ex ante evaluation policy is divided into two groups:

- 1. As a technical tool designed to analyze the outcomes of government's intervention which provides stakeholders with information for their decision making.
- 2. As a legal and institutional procedure related to public intervention decision making process (Matia & Dugaru, 2001).

Table 2. Types of ex ante evaluation policy

Criterion		Year		<b>Deficits and critics</b>	<b>Emphases</b>
Analysis field	EC	1986	Business	Discounts and lack of attention to other social and economic fields	Studying the impact of policies on business
	National and international organizations	1986 - 2005	Sectional	Lack of attention to other field in an integrated manner	Prescriptive action on impact evaluation (social, economy,) as a methodology and/or an independent

	EC	2005	Integrate	Lack of attention to diversified advantages in models, tools and methods to study each field	tool for ex ante evaluation policy Emphasis on studying all social, economic and other fields in model
Policymaking process			Alternative oriented ex ante evaluation	Policymakers' distrust on problem, options and goals	Distrust and studying problem, goals and option before approval
			Execution oriented ex ante evaluation	<ul> <li>Assuming a framework of future</li> <li>Structuring the selection of policy tools in a certain framework based on certain accepted pre-assumptions</li> </ul>	Predicting intentional and unintentional impact of policy tools before execution
			Impact ex ante evaluation		
Development	Moldavian government	2009	General	Lack of accurate precision	Studying with low technical complexities All public policy proposal in general
	Moldavian government	2009	Expanded	More cost and time	Studying with high technical complexities A few proposals based on importance and cost
The nature of methodological approaches	Matia and Dugaru	2011	Technical tools	Lack of attention to political and contributive dynamism and realities	ex ante evaluation as an instrumental and logical specialty - oriented model
	Matia and Dugaru	2011	A legal and institutional procedure	Specialty background is not a priority and is only an institutional measure	ex ante evaluation as a model to consider dynamics and complexity of policy (institutions and policy processes)

# 5. Functions and Results of Ex Ante Evaluation Policy

Stranova (2007) emphasizes that in the first glance, ex ante evaluation public policy seems straightforward and clear. Its aim is to inform decision makers on policies potential outcomes. In principle, however, the role of ex ante evaluation public policy is more complicated; the aim is to improve decision making process through gathering structured information on possible impacts of a devised policy and, as a result, a basis for decision making on the best policy. This method analyzes evaluating the impact of gathered empirical data or creates a comprehensive framework and evaluates public policy alternatives for possible outcomes in order assure that governmental intervention is at least proper and justifiable (Stranova, 2007).

As the UNOD program manager in Bratislava Regional Center, Sali (2007) believes that the aim of ex ante evaluation policy tools is to strengthen policymaking capacities (Sali, 2007). European Commission has used impact ex ante evaluation for all policy proposals that their key goals include: improving the quality of commission's proposals especially through fostering and facilitating

Structured, cohesive, analytical approaches based on evidences to formulate policy and to purvey full, balanced and comprehensive analysis on possible environmental, economic and social impacts.

- (1) Providing an effective aid for decision making especially through equipping policymakers in terms of relevant and thorough information based on radical logic of proposed intervention and possible impacts of interventions and also trough empowering policymakers to evaluate exchanges and to compare different scenarios when decisions are taken on certain routes.
- (2) Ex ante evaluation serves as a valuable communication tool especially through grooming and promoting internal communications, initial guarantee and effective cooperation in commission as well as promoting external communications through transparency and opening more policy development process for external stakeholders (Watson et al., 2007).

Matia and Dugaru (2011) believe that the aim of ex ante evaluation is to improve quality and coherence in policy development process. On the other have, ex ante evaluation policy helps decision making not an alternative for that (EC, 2005) which helps the cohesion of governmental intervention and improving public policymaking capacity. In some countries, impact evaluation is highly related to "better regulation and agenda aimed at improving the quality of laws and regulations and decreasing administrative expansion (Matia & Dugaru, 2011).

In combination, the general aim of ex ante evaluation policy is to help government to build more efficient policies as an important factor in responding determined impact by international markets, budgetary limitation of modern economy and outcomes of competitive policy demands. Besides, considering the meanings mentioned so far, ex ante evaluation policy is a valuable communication tool which paves the way for lobbying processes with stakeholders, fruitful discussions and disputes, analyses and valuable information (Matia & Dugaru, 2011). In below table, the functions and results from ex ante evaluation policy by different connoisseurs are outlined.

Row	Connoisseur	Year	Functions	Results
1	EC	2006	- Effective information aid	Improving the quality of public policy
			- Communicative tools	proposal
2	Sali	2007	- Policymaking capacity	
			improvement	
3	Stranova	2007	- Policymakers' awareness	
4	Matia and	2011	- Communicative tools	- Policy quality improvement
	Dugaru			- Policy correlation

Table 3. Ex ante evaluation functions and results

It shows that modern policymaking needs models and frameworks which create measures in policymaking and promoting its quality.

# 6. Methodology

In this research, it was attempted to draw an initial model by reviewing conducted studies. Then, by using Delphi technique, an incremental trend was emerged and ultimately, research final model was realized. Delphi technique is a process to gather data from specialists and achieving concurrence among their judgments. This process is conducted by using asset of methods to gather and analyze data combined with giving result feedbacks to experts. Using Delphi technique is appropriate when there is no integrated knowledge on an issue. Also, it particularly suitable when aims, improving our understanding on difficulties, opportunities, solution design, methods and models are all predicted. Present paper leads into ex ante evaluation policy model and is used to collect data through three techniques namely documents, Delphi and survey.

# 6.1 Sample and Population

Delphi technique is conducted by the contribution of people who have knowledge and expertise concerning research subject. They constitute Delphi group. Selecting competent people for group is, *inter alia*, the most important steps of this technique. On this basis, Delphi group members are selected by objective or judgment sampling (unlikely objective). In such sampling method, those people are selected as sample that is in the best position for providing needed information. They would have one or more below traits:

- (1) Faculty member specialized in futures studies and policymaking
- (2) Educations or researches on futures studies and policymaking

The quantity of the sample is an important item which should be regarded in Delphi technique. When there is homogeneity among elites, 10 to 20 members are provided (Habibi et al., 2014; Mashayekhi et al., 2005; Powel,

2003; Ukey & Pawelsky, 2014). Selected sample for this research consists of elites including university instructors (teaching background in futures studies and policymaking) as well as graduate and postgraduate students in these from universities of Tehran, International Imam Khomeini, Amir Kabir, Isfahan and policymaking/future study researchers from policymaking and futures studies research institutes. They participated in different rounds as outline in table 4.

Table 4. Participants' frequency distribution in research in terms of educations

%	Frequency		Education
	Policymaking	futures studies	
17.6	6	0	Doctoral
64.7	10	12	Postgraduate
17.6	5	1	Graduate

Table 5. Participants' frequency distribution in research in terms of respondents

% of	Responde	Connoisseur	Delphi
respondents	nts	S	rounds
66.6	34	51	1 <sup>st</sup> round
79.4	27	34	2 <sup>nd</sup> round
85.1	23	27	3 <sup>rd</sup> round

## 6.2 Validity and Reliability of Delphi Technique

Determining validity and reliability in researches which use qualitative method is not as same as positivistic methods. In present paper and in order to increase research validity, it was attempted to

- Use participants with enough specialty, motivation and tendency in relevant field (futures studies and policymaking connoisseurs)
- To use several rounds in executing questionnaires
- To confirm questionnaire's nominal validity in Delphi primary step by a number of futures studies and policymaking instructors

To keep research reliability, below items were considered:

- Delphi technique was used to achieve a certain method
- Respondents were selected based on relevant expertise
- Responses from each Delphi round were submitted to respondents as feedback
- Concerning the reliability of questionnaires, Dalki (1969) asserts that reliability ratio is greater than 0.8 (0/80) when Delphi group size in more than 13 members.
- Ultimately, it was attempted to create a level of concurrence.

# 7. Research Findings

In preliminary step, the initial questionnaire was devised by considering literature and other researches and submitted to 5 members of focus group. Thus, the questionnaire for the first Delphi step was designed.

## 7.1 Round 1

In the first step, designed method along with its details for each step was sent for Delphi group members (51). Totally, 34 questionnaires were returned and items with less than 1 standard deviation (SD < 1) were considered by authors for concurred items. According to responses and suggestions mentioned in the questionnaire, the results were shown in table 6. Considering respondents' frequency to each option and the average of each item, relevant proposals were provided and considering elites' suggestion, alternative goals evaluation, alternative resources and results evaluation in minor steps of model, definition of policy tools in the third minor steps, impact analysis of policy tools in the fourth step and stakeholders' preferences for each policy tool were all executed.

Table 6. First step of Delphi technique: minor steps of ex ante evaluation (n = 34)

Steps	Minor steps	Mean	SD
(1) Defining policy field	Key actors and influential groups	3.08	1.16
	overall objectives evaluation	3.11	1.09
	Evaluating assumptions and pre-assumptions	3.00	1.25
(2) defining possible policy scenarios and scanning	Defining possible scenarios	2.94	1.20
	Scanning the scenarios (consistency, fitness and limitations)	2.79	1.17
(3) logical models of possible policies	logframes	2.88	1.17
	outcome logic model	2.97	1.31
	Defining objectives in multi layers	2.85	1.25
(4) impact analysis of possible policies and their	Identifying economic, social and environmental	2 11	1 12
comparison	impacts as well as general influences and risks	3.11	1.12
	Stakeholders' preferences for each scenario	3.02	1.19
(5) identifying progress key measures and indicators		2.76	1.15
(6) recommendation and information feed supply to de	velop future answers	2.94	1.15
Functions		Mean	SD
Communicative tools among policymakers and stakeho	olders	2.91	1.21
Policymakers' informing		2.73	1.28
Policymaking capacity improvement		2.67	1.14
Results		Mean	SD
Policy quality improvement		2.85	1.23
Policy correlation promotion		3.14	1.13

Note. 1 = very low; 2 = low; 3 = medium; 4 = high; 5 = very high

## 7.2 Round 2

While posing changes in steps, the second questionnaire was designed and sent again to group members along with previous opinions of each person and their differences with other elites' attitudes. Group members announced their agreement rate considering other group members' insights as well as posed changes. 27 respondents answered the questions as rendered in table 7. In this step, the proposal to define the outlines of policy scenario or possible policy scenarios was raised for the second minor step. In this regard, our definition on ex ante evaluation policy can be the subject a research for future. Baselines mean key questions which should be considered in ex ante evaluation and shown in the questionnaire of the third step.

Table 7. First step of Delphi technique: steps and minor steps of ex ante evaluation (n = 27)

Steps	Minor steps	Mean SD
(1)Defining policy field	Key actors and influer	ntial groups3.33 1.24
	overall objectives	s evaluation3.62 1.07
	Evaluating assumptions and pre-a	ssumptions3.51 1.08
	Resource evaluation	and results 3.66 .78
(2) defining possible policy scenarios and scanning	Defining possibl	le scenarios3.11 1.05
	Scanning the scenarios (consistency, fitness and	limitations)3.51 1.12
3) logical models of possible policies		logframes3.44 1.01
	outcome l	ogic model3.33 1.03
	Defining objectives in r	nulti layers3.51 .80
	Defining 1	policy tools3.66 .62
(4) impact analysis of possible policies and theirIdentifying econom comparisoninfluences and risks	, ,	eneral 3.62 .83
Stakeholders' prefe	rences for each scenario	3.55 .97
(5) identifying progress key measures and indicators		3.66.67
(6) recommendation and information feed supply to develop future ans	wers	3.51.89
Functions		Mean SD
Communicative tools among policymakers and stakeholders		3.55 .84
Policymakers' informing		3.51 .93

Policymaking capacity improvement	3.48 .93
Results	Mean SD
Policy quality improvement	3.40 .84
Policy correlation promotion	3.51 .75

#### 7.3 Round 3

According to explanations for elites, 23 of them provided their responses as shown in table 8. Since mean value higher than 3.5 is considered as good concurrence and SD of responses is decreased from 0.34 and 0.22 in rounds 1 and 2 to 0.19 in round 3 and for model functions, it has decreased from 0.73 and 0.48 in rounds 1 and 2 to 0.31 in round 3 and it is decreased for results from 0.88 and 0.63 in rounds 1 and 2 to 0.41 in round 3, it indicates concurrence so polling process is stopped.

Table 8. First step of Delphi technique: steps and minor steps of ex ante evaluation (n = 23)

Steps	Minor steps	Mean	SD
(1)Defining policy field	Key actors and influential groups	4.26	.61
	overall objectives evaluation	4.43	.50
	Evaluating assumptions and pre-assumptions	4.13	.34
	Resource evaluation and results	4.04	.76
(2) defining possible policy scenarios and scanning	Defining possible scenarios	4.04	.56
	Scanning the scenarios (consistency, fitness and limitations)	4.22	.42
	Defining baseline of policy scenario or possible policy scenarios	4.43	.590
(3) logical models of possible policies	logframes	4.26	.44
	outcome logic model	4.09	.51
	Defining objectives in multi layers	4.13	.34
	Defining policy tools	4.74	.44
(4) impact analysis of possible policies and their comparison	Identifying economic, social and environmental impacts as well as general influences and risks	4.22	.51
	Stakeholders' preferences for each scenario	4.09	.51
(5) identifying progress key measures and indicators		4.09	.59
(6) recommendation and information feed supply to dev	velop future answers	4.22	.60
Functions			
Communicative tools among policymakers and stakeho	lders	4.26	.44
Policymakers' informing		4.04	.56
Policymaking capacity improvement		4.13	.34
Results			
Policy quality improvement		4.35	.57
Policy correlation promotion		4.04	.47

Source: authors

## 8. Conclusion and Discussion

Although we can observe development in using models, tools and methods in ex ante evaluation policy approach till 2014 practically and since 2003, the development and evolution of models, tools and methods especially in Europe theoretically (Lianos & Fazekas, 2014; Matia & Dungaru, 2011), as expressed by Stranova (2007) and Fazekas (2014), this ex ante evaluation model informing policymakers in order to improve public policy. However, it does not consider side effects and, overall, we observe lack of intervention alternative ways (Verschurn & Gestel, 2009; Lianos & Fazekass, 2014).

It is due to the fact that we are observing two approaches in this regard: planning oriented approach and alternative oriented approach. The former is older in which policy goal, option, policy objectives and policy tools are assumed and if there is uncertainty, it is due to the outcomes of executing a policy or a new policy tool. It examines the impacts of this policy or policy tool in different fields such economic, social, environmental, risks and poverty. It has an analytical background and a homogenous thinking. In this approach, futures studies is a facilitator and supporter. The second approach raised by Morris (2011) and Lianos and Fazikas (2014) in ex ante

evaluation, uncertainty and discontinuities depend on problem, policy goal, policy options, objectives and policy tools and have holistic and convergent thought in ex ante evaluation which suggest future study as a basis in policy analysis and ex ante evaluation policy. However, there was no mature model in this field. In present paper, ex ante evaluation policy was designed by latter approach and Delphi triple courses indicated that there is a concurrence among specialists and one can stop the courses.

In this model, policy scenario environment is studied by policy contexture and variables and is examined by current uncertainty in aims, problem and options.

In the second step, concerning identified variables in the first step and their relationship, policy scenarios are formed and by their consistency, limitations, fitness and other measures, possible scenario or policy scenarios are selected and baselines and key questions are determined to identify functional goal alternatives and policy tools in next step.

The third step is to devise policy logic model or possible policies which include logframes, realized models, defining functional goals in multi layers and their comparison including identification of economic, social and environmental impacts and general effects and dangers and preferences of stakeholders for each scenario and policy tool and then preferred options and tools are determined.

The fifth step includes determination of key measures of progress which shows each policy option, objectives or policy tools are closer to reality used to keep monitoring the continuance of transformations and policymakers by knowing guidelines and measures to have a better progress in policymaking environment.

The sixth step includes recommendations and information supply to develop future responses. Principally, all ex ante evaluations aims at aware policymakers via provided recommendations and information in the format of reports and exchanged information in interactive processes and results for ex ante evaluation.

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#### Notes

Note 1. In UK, the results of a study on National Auditing organization by van Gestel indicated that it is true in 70% of cases.

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