



## THE BEHAVIORAL ASSUMPTION UNDERLYING A POLICY: STUDY OF POLICY INSTRUMENTS

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### Abstract

*The study of policy instruments is geared to the re-construction of final relations, being a species of the genus causal relations. To put it differently, goal-attainment is considered to be the dependent variable while instruments are seen as one of the independent variables. It should be underscored though that a policy theory does not reflect a scientific theory in the traditional sense of a universal law that has been put to an empirical test. The external validity of the findings is pretty low. A policy theory provides guidelines for action and is, as such, ideographic rather than nomologic in nature. Being utilization-focused, a policy theory should meet both academic and practical standards criteria. As they often conflict, a policy theory is often the outcome of a trade-off and consequently sub-optimal in nature. The quality of a policy theory – coherence, reliability, validity – is an important source of a policy fiasco.*

**Keywords:** Policy Study; National Policy; International Policy

### INTRODUCTION

The study of policy instruments dates from the early seventies, though there has been written a lot before especially in economics about government intervention in relation to market imperfections. A policy instrument refers the means of government intervention in markets or, in broader perspective, society in order to accomplish goals or to solve problems. The behavioral assumption underlying a policy instrument is that it attempts to get people do things that they might not otherwise have done. In the last fifty years we featured a transformation not just in the scope and scale of the role of the government, but also in the proliferation of tools that it has to its disposal for public action. In retrospect a distinction can be made between three partly overlapping stadiums in the study of policy instruments. The low impact of policy tools has induced a development in society that gave birth to a second generation of policy instruments which is less coercive and more indirect. The assessment of the impact of policy instruments [policy evaluation] is complicated by the fact that they often come as part of a policy mix. Furthermore,

effectiveness is just one of the many criteria to measure performance. The entry is completed with a look at the way ahead.

### The Study of Policy Instruments

The *classical* approach [1970-1985] that is rooted in the instrumentalist school of thought, which has been discredited because of its top-down and mechanical view of the world. It has put quite some effort in a rather semantic discussion about the definition of a policy instrument, the risk of metaphors and reification and the classification of policy instruments on the basis of their intrinsic characteristics (Alam et al., 2025). It claims that the selection and consequently the application of instruments are mainly done on the basis of the characteristics of a specific instrument and its effects in terms of goal-attainment (Hossen & Pauzi, 2025). Soon it became clear that goal-attainment can not attributed to the characteristics of instruments, but that also characteristics of the context should be taken into account (Hossen & Pauzi, 2025).

The *instrument-context* approach [1985-1995] focused on the development of a theory of policy instruments ‘instrumententheorie’ that would enable policy makers to select the appropriate policy instrument for the problem at hand. The selection of a policy instrument is not only done on the basis of the ‘logic of consequence’, but also the ‘logic of appropriateness’ that has the ‘goodness of fit’ in its colors. The attention for the context has led to what may be labeled ‘refined instrumentalism’ (Rashed et al., 2025).

Finally, instruments are considered one of the many variables in the *contextual* approach that takes policy implementation as a point of departure. The study of policy instruments merges with the study of implementation. The study of policy instruments as been affected as such by the developments in the field of implementation, notably the shift from implementation to governance. The remaining of this section is structured as follows. We start with a short section about policy theory as a policy instrument is not isolated, but comes in combination with objectives as well as resources. We proceed with a classification of policy instruments, making a distinction between three families of policy instruments. Next, attention is paid to the choice of policy tools [policy design] and the application of policy tools [policy implementation]. The low impact of policy tools has induced a development in society that gave birth to a second generation of policy instruments which is less coercive and more indirect. The assessment of the impact of policy instruments policy evaluation is complicated by the fact that they often come as part of a policy mix. Furthermore, effectiveness is just one of the many criteria to measure performance. The entry is completed with a look at the way ahead (Mohd Pauzi & Shahadat Hossen, 2025).

### Policy Theory

A policy instrument comes not in isolation, but is part of ‘intervention theory’. It can be further specified by making a distinction between the form of the intervention, i.e. a policy, a program or a reform. In this context, we pay attention to a ‘policy theory’ i.e. the set of assumptions underlying a policy. A policy theory, following Andries Hoogerwerf, consists of assumptions about three kinds of relations:

1. Normative relations between what ‘is’ and what ‘ought’.
2. Final relations between objectives and means to accomplish these objectives.
3. Causal relations between causes and effects.

The study of policy instruments is geared to the [re]construction of final relations, being a species of the genus

causal relations. To put it differently, goal-attainment is considered to be the dependent variable while instruments are seen as one of the independent variables. It should be underscored though that a policy theory does not reflect a scientific theory in the traditional sense of a universal law that has been put to an empirical test. The external validity of the findings is pretty low. A policy theory provides guidelines for action and is, as such, ideographic rather than nomologic in nature. Being utilization-focused, a policy theory should meet both academic and practical standards criteria. As they often conflict, a policy theory is often the outcome of a trade-off and consequently sub-optimal in nature. The quality of a policy theory – coherence, reliability, validity – is an important source of a policy fiasco.

### Policy Instruments in All Shapes and Sizes

A policy instrument refers the means of government intervention in markets or, in broader perspective, society in order to accomplish goals or to solve problems. The means of tackling policy problems are often called policy instruments or policy solutions. The labels are not without risks. A comparison of a policy instrument with a hammer, a pair of pincers or a screwdriver may be misleading because it attributes qualities to means that they do not have in reality. Consequently they may lead to unintended and unforeseen problems that even overshadow the original problems. The same applies for the term policy solutions as it gives the wrong impression that problems may be solved for once and for all. In reality problems are solved at best partly and temporarily.

Moreover, the solution of one problem may create another problem or in Aaron Wildavsky's own words: policies are more and more about coping with the consequences of past policies and less and less about events in society. Instead of permanent solutions we should think of permanent problems in the sense that one problem always succeeds and replaces another. A policy is according Deborah Stone more alike an endless game of Monopoly than a bicycle repair.

### Three Families of Policy Instruments

The study of policy instruments has been long dominated by the efforts to put together a classification of policy instruments on the basis of their characteristics. One of the first is a typology by Christopher Hood making a distinction between instruments for the collection of information [detectors] versus instruments directed to influence development in society [effectors]. A quick scan of the literature reveals that the study of policy instruments is almost exclusively focused upon the latter. It is nowadays common to make a distinction between three *families* of policy instruments [Van der Doelen 1989: 53-57], also referred to '*sticks, carrots and sermons*'. The first family consists of regulatory instruments, such as orders and prohibitions [licenses, permits, regulations]. Rules may also establish rights. Rights must rest on authoritative rules from the state, but are distinctive in their reliance on citizens for enforcement. The second family embraces financial means, providing incentives. They may be positive [grants, subsidies] as well as negative [taxes, user charges] from a consumer's perspective. The third family includes communicative tools, which may be directed at the increase as well decrease the degree of information of the other party which has got a boost due to the development in the digital age.

Table 1: *Three Families of Policy Instruments*

| Policy Instrument | Positive      | Negative     |
|-------------------|---------------|--------------|
| Regulatory        | Prescriptions | Prohibitions |

|                      |                   |                     |
|----------------------|-------------------|---------------------|
| <b>Economic</b>      | Grants, Subsidies | Taxes, User Charges |
| <b>Communicative</b> | Information       | Propaganda          |

Source: Van den Doelen 1987: 53-57; Bemelmans-Videc et al. 1998: 250.

In addition, a fourth family can be distinguished called organization that referring to direct government, i.e. the provision of goods and services including treatment. The classification of policy instruments is further elaborated by Michael Howlett in a spectrum of ‘substantive’ policy instrument on the basis of the level of state provision with at the one end direct provision of good and services and on the other end family and community. In addition ‘procedural’ instruments can be distinguished that are primarily intended to alter the policy process rather than the mix of goods and services provided to society

The typology of policy instruments is not without discussion though as, for instance, the utilization of symbols as policy instrument – ‘words that succeed and policies that fail’ to quote the subtitle of Murray Edelman’s book on political language – not fit. In most cases hardly any attention is paid to internal instruments used to influence administrative processes, even though they might be preferable from a control or management perspective. The focus is almost exclusively on external instruments which are geared to a change of the environment of the government, i.e. the developments in society. Besides, there is no place for informal instruments to shape a policy according its own preferences such as the change of membership or size of the decision making body, bargaining and negotiation, mobilization of political support as well as deceit and double crossing and even threats. In response to these and other drawbacks several other typologies are offered in the literature, for instance on the basis of the degree of:

Coercion: the extent to which a policy tool restricts behavior as opposed to merely encouraging or discouraging.

Directness: the extent to which a public agency is involved in all stages of the policy process.

Automatically: the extent to which a policy tool is utilizing the existing administrative structure.

Visibility: the extent to which resources attributed to a policy tool show up in the budget end program review.

The degree is coercion is considered as the main criterion though a variety of factors according Lester Salamon have put a premium on tools that are automatic, but indirect and invisible. Unfortunately, none is completely exhaustive or mutual exclusive. Last but not least, policy instruments rarely appear in a pure form. They come bundled in programs combining various tools, each being a package containing a type of good or activity, a vehicle for the delivery of this good or activity and a delivery system. A prohibition for instance may be delivered by a public agency in the form of a rule. The diversity of policy instruments though should be considered as a benefit rather than a draw back, referring to Ross Ashby’s ‘law of requisite variety’ i.e. the greater the variety within a system, the greater its ability to reduce variety in its environment through regulation.

### **Policy Design: The Selection of Policy Instruments**

The selection of policy instrument is often associated with a tool-kit from which the government is free to choose a policy instrument. In practice there is not such a thing as a ‘tool-kit’, not to mention that the government is free to choose. On the contrary, a subsidy is not simply a ‘bag with money’, but represents an organizational unit too. A third party may have preferences of its own. A specific policy instrument, for instance, may provide discretionary power and, therefore, room to maneuver. The same applies for the target group as interest groups have contra-instruments at their disposal which may frustrate a potentially effective policy instrument. The choice of policy tools is according B. Guy Peters driven by what he has called the ‘five i’s’ that combined together constitute a

checklist of factors that should be taken into consideration:

1. Ideas and ideologies may shape the selection of policy instrument giving preference to a specific tool above other tool.
2. Interests that refer to the assumption that individuals try to maximize their personal utilities.
3. Institutions may have preferences for instruments over which they have control and which they are familiar.
4. Individuals pointing at the role of political entrepreneurs to win support for a new policy.

International environment as shown by the consequences of the process of globalization.

In reality, policy instruments are often chosen for all but rational arguments, i.e. the assessment of the positive and negative effects [impact assessment]. A policy instrument is often chosen because of extra-rational arguments to list just a few:

- The normative or political dimension of a policy instrument. A policy instrument is not just a tool. Contrary to the well-known statement by Niccolò Machiavelli, ends do not justify means as Arthur Ringeling has been argued correctly. The choice of a policy instrument is not value free as it may reflect an ideological stance. Besides, a policy instrument may strengthen or weaken the position of an actor.
- The institutionalization of policy instruments as the selection of a policy instrument may be subject to 'path dependency'. A policy instrument that works tastes for more. The bias a policy maker towards a specific policy instrument may even go that far that the problem at hand is shaped in such a way that it can be solved, at least potentially, by the policy instruments of his choice.

Last, but not least a policy instrument may be chosen because it is 'en vogue' as illustrated by the deregulation movement of the eighties that seems to more an expression of a prejudice against the government or the preference for the market than the outcome of a careful scrutiny of the 'pros and cons' of regulation. Rules and standards have been abolished in favor of financial incentives. Only recently we feature a movement backwards in favor of reregulation.

### **Policy Implementation: The Application of Policy Instruments**

The application of instruments, often referred to as policy implementation, has been long directed by what Herman van Gunsteren has called the 'rational central-rule approach' that is based upon the superior analytical insights of an elite and on the centrally controlled implementation of these. It assumes that actors who are involved in the enforcement of a rule are a puppet of a string. In reality they are neither will-less nor powerless as illustrated by the famous study by Jeffrey Pressmann and Aaron Wildavsky on the implementation of a program to hire the hardcore unemployed minorities of Oakland or *'how great expectations in Washington are dashed in Oakland or, why it's amazing that federal programs work at all?'*

The study of policy instruments has been affected by the developments in the field of policy implementation. The confrontation between the top-down and bottom-up approach has induced a more horizontal mode of policy implementation often referred to as governance. The shift from hierarchy to markets and networks has substantially changed the role of the government. The government is just one of the actors, though a prominent one – the government has monopoly on the utilization of power, more resources at its disposal and often serves as network manager – each pursuing its own interest and strategy. Being dependent of each other for the accomplishment of their objectives, actors are involved in a multi-actor game of 'dealing and wheeling'. A policy

is, as such, a compromise, the outcome of the interaction between these actors or to put it differently the result of co-production of various actors rather than something imposed by one single actor, i.e. the government.

### **The Second Generations of Policy Instruments**

The shift in governance from hierarchy to markets and networks gave birth to what De Bruijn and Ten Heuvelhof have called the second generation of policy instruments. A multi-actor game requires other skills than the conventional tools, notably multi-lateral instruments such covenants, public-private partnerships and voluntary agreements. Contrary to the first generation of policy instruments they anticipate on potential resistance of the stakeholders by taking into account the characteristics of a network, notably the autonomy or isolation of the target-group, the interdependency of the actors as well as the pluriformity of society.

The second generation of policy instruments has in common that the government takes a more remote stance. Instead of directing the government is facilitating development in society [steering from a distance]. The new tools have in common that they are highly indirect and heavily rely on a wide assortment of ‘third parties’ for the implementation of a policy. In addition, they are characterized by high degree of relativism and voluntarism. It is left to the target group to take action and to change its behavior. The development of a second generation of policy instruments does not mean that the first generation of policy instruments suddenly has become obsolete. To the contrary, they rather supplement than replace the first generation of policy instruments. In many cases ‘vertical’ instruments is still appropriate, even in a network setting. The introduction of more ‘horizontal’ instruments may be seen as fine-tuning to a new situation. In practice, the difference is not that big. The ‘new’ policy instruments often go under the same label as the ‘old’ policy instruments, though the emphasis is more on the bilateral or even multilateral aspect than the unilateral aspect of governance.

### **Policy Evaluation: The Effectiveness of Policy Instruments**

The performance of the government is often measure in terms of goal-attainment and effectiveness. The effectiveness of tools – the contribution policy instrument to goalattainment – may be blurred by external or intervening variables, such as the financial crisis, that are beyond the control of the government. Consequently, an effective tool may not lead to goal-attainment, whereas goal-attainment may conceal an ineffective tool.

The review of policy instruments is further complicated by a number of circumstances that make it difficult to be conclusive:

First, goals are not set for once and for all, but may be subject to goal-displacement. The assessment of a policy instrument in terms of the original goals may be methodological sound, but not of much practical relevance. Second, it may be hard to measure the effect of a policy instrument as they often come and go as part of a ‘policy mix’. A subsidy, for instance, is often shaped as a regulation containing additional conditions. A regulation is usually backed-up by sanctions and inducements are predicated on rules for handing out rewards or punishments. The packaging could be threefold:

*Horizontal* packaging that happens if two or more policy instruments are directed simultaneously at the same agent.

*Vertical* packaging that refers to the application of a policy instrument in order to facilitate the implementation of another policy instrument.

*Chronological* packaging which implies a sequence in the selection or application of diverse policy tools.

The packaging of instruments makes it extremely difficult, if not impossible to sort out the precise effects of an individual policy instrument and, therefore, its contribution to the accomplishment of objectives.



Third, the effect of a policy instrument may be ‘hollowed-out’ according to Roeland in ‘t Veld by the ‘law of diminishing effectiveness’ that states that a policy instrument may become obsolete after some time because stakeholders learn how to cope with the negative or unwelcome effects of a policy instrument. Last, but not least should be noted that effectiveness of a policy instrument is just one of the many criteria that may be used to evaluate a policy. The call for improvement of efficiency in the public sector of the last few years has gone at the expense of the equity of the distribution of goods and services. Lately the accountability, legitimacy and responsiveness of the government have become an issue.

### **The Way Ahead: Old Wine in New Bottles?**

The reinvention of government has not only put the government back in the spotlight, but also induced some other changes. Steering, not rowing is the device. Borrowing insight from the NPM-movement, attention has been shifted away from the primary towards the secondary process in public organizations. Public management has replaced public policy at the heart of public administration. It has induced a change in vocabulary. In today’s jargon instruments are referred to as outputs, underscoring that the provision of good and services may be considered too as a policy instrument. A lot of effort is now put in the development of indicators in order to measure performance. The purpose is twofold. On the one hand, allocation and efficiency may be fostered by linking inputs to outputs. On the other hand, effectiveness may be promoted by relating outputs and outcomes. It is still too early to judge the performance movement, but the focus on the development and utilization of indicators may cause a ‘performance paradox’ i.e. generating contrary or even perverse effects by inter alia focusing on what we can measure and leaving out what we are not able to measure. The results therefore should be treated with care.

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### **REFERENCES**

- Howell, J. (2007). ‘Gender and Civil Society: Time for Cross-Border Dialogue’ in *Social Politics: International Studies in Gender, State and Society*, vol. 14, no. 4, pp. 415-436.
- Horn, J. (2013). *Gender and Social Movements: Overview report*. BRIDGE Cutting Edge Pack. Brighton: IDS.
- Hoare, J. and Gell, F. (eds). (2009). ‘Women’s Leadership and Participation: Case studies on learning for action’, Oxfam, Rugby.
- UNIFEM. (2008). ‘Chapter 1: Who Answers to Women?’, in *Progress of the World’s Women 2008/9: Who Answers to Women? Gender and Accountability*, UNIFEM, New York .
- Ballington, J. et al. (2011). ‘Empowering Women for Stronger Political Parties: A Good Practices Guide to Promote Women’s Political Participation’, United Nations Development Programme and National

Democratic Institute.

- Tadros, M. (2011). 'Women Engaging Politically: Beyond Magic Bullets and Motorways', Pathways Policy Paper, Pathways of Women's Empowerment RPC, Brighton.
- Krook, M. L. and Norris, P. (2014), Beyond Quotas: Strategies to Promote Gender Equality in Elected Office. *Political Studies*, 62: 2–20.
- Clots-Figueras, I. (2019). 'Are Female Leaders Good for Education? Evidence from India' Working Paper 07-73, Universidad Carlos III de Madrid.
- Beaman, L. et al. (2019). 'Powerful Women: Does Exposure Reduce Bias', *The Quarterly Journal of Economics*, vol. 124, no. 4, pp. 1497-1540.
- Bemelmans-Videc, M.L., Ray C. Rist & Evert Vedung eds. [1998], *Carrots, Sticks and Sermons. Policy Instruments and Their Evaluation*, New Brunswick/London: Transaction Books.
- Bressers, J.Th.A. & P.J. Klok, [1987], Grondslagen voor een instrumententheorie [Foundations for a Theory of Instruments], *Beleidswetenschap. Kwartaalbericht voor de Beleidswetenschap* 1 [1]: 77-97.
- Bressers, J.Th.A. & Laurence J. O'Toole [1998], The Selection of Policy Instruments : A Network-baed Perspective, *Journal of Public Policy* 18 [3]: 213-239.
- Alam et al., 2025. (2025). *Online Corrective Feedback and Self-Regulated Writing: Exploring Student Perceptions and Challenges in Higher Education*. 15(06), 139–150.  
<https://doi.org/https://doi.org/10.5430/wjel.v15n6p139>
- Hossen, M. S., & Pauzi, H. M. (2025a). Bibliometric Analysis of Social Support for the Older Adults. *Ageing International*, 50(1), 1–24.
- Hossen, M. S., & Pauzi, H. M. (2025b). Synthesis of Psychological Wellbeing of the Elderly Individuals Literature Using Bibliometric Analysis. *Pertanika Journal of Social Sciences & Humanities*, 33(3).
- Mohd Pauzi, H., & Shahadat Hossen, M. (2025). Comprehensive bibliometric integration of formal social support literature for elderly individuals. *Housing, Care and Support*, 1–17.
- Rashed, M., Jamadar, Y., Hossen, M. S., Islam, M. F., Thakur, O. A., & Uddin, M. K. (2025). Sustainability catalysts and green growth: Triangulating evidence from EU countries using panel data, MMQR, and CCEMG. *Green Technologies and Sustainability*, 100305.



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