T02P17 / Policy Tools for Environment and Social Policies

Topic : T02 / Comparative Public Policy sponsored by Journal of Comparative Policy Analysis

Chair : M Ramesh (LKY School of Public Policy, National University of Singapore)

Second Chair : Namrata Chindarkar (Lee Kuan Yew School of Public Policy)

GENERAL OBJECTIVES, RESEARCH QUESTIONS AND SCIENTIFIC RELEVANCE

The tools approach to public policy has a long history but only recently has it begun to address complex questions of tools mixes and tool portfolios. Rather than focus on selecting a single tool which has historically characterized studies in the areas, recent studies focus on mix of tools as well as hybrid tools that combine elements of different kinds of tools. They recognize that many contemporary policy problems are often too complex for binary comparisons and scoring for the purpose of selecting the most effective tool. They acknowledge that a concert of tools – substantive, procedural, behavioral nudge, and so on ? are required to address the different types of behavior that often lie at the source of the problem. These complexities in the substance and context of design and selection of policy tools choice are most evident in the areas of environment and social policies.

CALL FOR PAPERS

The panel invites theoretical and empirical papers on the design of policy tools for meeting environmental and social policy challenges.

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Session 1Policy Tools in Environment Policy

Thursday, June 29th 13:30 to 15:30 (Manasseh Meyer MM 3 - 4)

Mixing regulatory and non-regulatory instruments in sustainability policy: Nudging for reduced energy consumption

Sarah Giest (Leiden University)

Nudging as a policy tool has gained much attention and is thus far treated by governments as a non-regulatory, cost-effective instrument to reach policy goals. It is seen to complement or replace existing tools by altering people's choice architectures towards behaviours that align with government aims, but has fallen short in meeting those targets. One crucial aspect is that governments do not nudge citizens directly, they often need private agents to nudge their consumers. Focusing on those carrying out the nudge re-introduces the regulatory dimension in a different way, it adds the role of regulatory tools in impacting the agents that ultimately nudge citizens to reach the policy goal.

Based on this notion, the paper focuses on the combination of tools that impact behavioural change by looking at the mixture of instruments containing nudges. This is done in the energy policy context where nudging is increasingly incorporated to lower household energy usage through smart meter technology. This technology is being rolled out in almost all European member states as a device to collect the data for information-based nudging. There are differences in how this rollout is regulated at national level and the instrument mixes that follow. The paper compares two European countries, Sweden and the UK that encountered similar challenges in introducing nudging tools in different regulatory and market settings.

Public Acceptance towards Different Policy Tools — Using Smog Control Policies in Beijing as an Example

Lingyi Zhou (School of Public Policy and Management, Tsinghua University)

Yixin Dai (Tsinghua Uiversity)

Inhalable particles have become the principal pollution source in China's majority areas, triggering severe smog crisis and causing great harm to people's health. Chinese governments started designing and implementing smog control policies, directly and indirectly. Among all alternatives, traffic control has been widely adopted as the most efficient and relevant policy tool in many cities given that road transport is one of the main sources of PM2.5 accounting for approximately 25-30% per year. For example, Beijing is the first city to implement driving restriction policy since the 2008 Olympics to alleviate air pollution. As rule-breaking behavior (i.e. drive on plate restricted days) was constant, Beijing government intended to adopt new policy tools such as congestion pricing in 2013. However, these policies encountered different level of public opposition. Previous survey in Beijing showed that 45.18% of respondents opposed odd-even number driving restriction scheme, while 61.4% opposed congestion charge. The critical puzzle facing Beijing government is to what extent policy tool selection might influence policy implementation effectiveness giving that public acceptance might vary towards these tools.

This puzzle requires an exploratory theoretical discussion between policy tool selection and public acceptance towards these tools. On the one hand, policy makers tend to ignore public in policy-making process. They prefer mixture of different types of tools during policy-making process with the assumption that multiple policy instruments can combine advantages of different tools and avoid policy ineffectiveness. Given that policy instruments range from coercive regulations to flexible market-based tools, significant trade-offs arise along with instrument selection. For regulations, assuring a reasonable degree of fairness in the distribution of impacts, or ensuring political feasibility, often will require a sacrifice of cost-effectiveness. Regarding smog control policies in Beijing, driving restriction was designed as coercive regulation while congestion pricing was a market-based tool. It is worth noting that, the government relies on familiar and

simple policy tools and ignores public acceptance most of the time, which leads to the argument of “solutions chasing problems” during the policy making process. On the other hand, however, public acceptance is playing increasingly significant role in policy-making process all over the world and in China. Policy acceptance represents the legitimacy of policy design, which is of great importance to policy making.

The literature gap lies in the fact that little discussion has been put on how to balance tool selection pattern in government and gain enough public acceptance towards these tools. This paper tries to explore the causality relationship by answering following questions: how does policy tool type serve as a moderator to influence public acceptance level? If so, what is the influential channel: does the tool type influence public acceptance directly or through other essential factors?

This research adopted smog control policy in Beijing as the study subject and compared two types of policy tools, driving restriction regulation and congestion fee, to explain public acceptance formation from six dimensions: policy tool type, trust in government agencies, perceived fairness, benefit perception, perceived risk and knowledge of smog. The preliminary of 285 valid questionnaires in Beijing shows that people generate different acceptance level towards regulation and economic means, with more opposition towards economic means. Car ownership and traffic inconvenience influence public acceptance negatively, while political trust, perceived fairness and environmental concern have positive effects significantly. Especially, compared with regulation, the positive effects of WTP is more significant for economic means, while pro-environmental attitude and car ownership have negative influence.

We are expecting to reveal what features of tools cause different public acceptance level towards different tools via further analysis, and to explore policy implication of balancing policy tool selection and public acceptance.

What explains the selection of policy tools and their mixes in renewable energy policy?

Daeun Kim (Korea University)

Governments have strongly intervened in the energy sector through various policy tools for various objectives. When mitigating climate change became one of the most important objective in national energy policy, renewable energy is drawing increasing attention as a substitution for traditional fossil energy. The policy goal of renewable energy is rather simple and clear-expanding the proportion of electricity generated from renewable energy sources in energy supply systems. However, renewable energy policy lies at the intersection of different policy areas such as industry, energy, environment and sustainable development. Simultaneously, many factors and competing interests in these policy areas continue to influence renewable energy policy. Therefore, governments should mediate these conflicting interests in order to achieve policy goals effectively.

Toward this end, much research has been done understanding the effects of renewable energy policy tools. While relatively less effort has been placed on the renewable energy policy mix. Specifically, there have been few studies on how different policy tools are selected and combined in the renewable energy area. In addition, previous researchers have generally focused on successful cases in industrialized countries. Consequently, there are clear limitations in extending these researches to underdeveloped countries.

Accordingly, the critical research question of this paper is as follows: why are some policy tools chosen over others, and how are different countries combining their policy tools for renewable energy policy? To test our research questions, we will conduct time-series panel analysis for more than 70 countries. Most renewable energy policy tools can be categorized according to the extent of state intervention in using them. As dependent variables for analysis, we categorize substantive policy tools into regulation and economic incentive. The degree of adoption in each category can reflect each countries’ selection of policy mix. Furthermore, diverse factors from complex aspects of renewable energy such as electricity production from other resources, CO2 emission, energy dependency and environmental concerns are considered as independent variables in this time-series model. In order to derive valid policy implications, the data covers not only Western developed countries, but also developing countries in Asia and Africa who want to make effective renewable energy policy portfolios.

Implementation and effectiveness of ETS in motivating enterprises’ environmental innovation

Lili Li (Auburn University)

Emission trading scheme (ETS) and voluntary agreements (VAs) have been widely used for energy efficiency enhancement and emissions reduction in industries in developed countries since the 1990s. ETS works by internalizing negative environmental externalities through economic signals, while VAs address

negotiations between governments and industrial enterprises. In contrast to traditional command-and-control approaches, these two innovative policy instruments – especially when combined – are expected to be more flexible and effective. Existing studies show that the success of ETS and VAs are influenced by policy design, policy implementation and characteristics of participants. However, there is a lack of empirical evidence from developing countries, and limited evidence illustrating the effectiveness of these policy instruments in causing actual technological or organizational changes, which are significant for long-term dynamic efficiency in emission reduction and energy conservation. This study contributes to existing research by focusing on the ETS combined with VA programs that is used for reducing energy consumption and, thereby, energy-related emissions in China, a developing country yet the largest greenhouse gas emitter.

This study addresses two problems: who participate in the environmental programs and are those innovative environmental policy instruments effective in encouraging enterprises to undertake green innovation? Firstly, this study investigates the characteristics of participants in China's ETS and energy conservation VA programs using a principal component analysis in order to describe and explain the level of participation. Data for analysis is collected from the database of publicly listed enterprises in Shenzhen Stock Exchange. Secondly, this study evaluates the effectiveness of ETS combined with VA programs on the adoption of green technological and organizational innovation by industrial enterprises, and how the effectiveness varies with characteristics of participants, using a comparative case study analysis and data extracted from corporate social responsibility reports. The technological innovation refers to adoption of state-of-the-art technologies, or research and development (R&D) in new energy technologies that contribute to energy conservation/emission abatement, while the organizational innovation refers to integrating energy conservation/emission abatement related issues into organizational structures or activities. The implementation of ETS is expected to influence small-scale investment decisions and nudge technological innovation closer to market. In order to stimulate substantial technological innovation, ETS has to be complemented by other policy instruments. In the end, this study explores how to improving the policy effectiveness by drawing relevant lessons from the European countries' experiences in policy design and implementation, and to discuss to what extent that the lessons learned from China can be transferrable to other developing countries.

The findings of this study would contribute to implications for emission abatement and energy efficiency enhancement of industrial enterprises through the adoption of innovative policy instruments or mix of policy instruments in developing countries. For China, this study would directly provide implications for improving its upcoming national ETS in 2017 and establishing other tradable permits policies.

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Session 2Policy Tools in Social Policy

Friday, June 30th 08:15 to 10:15 (Manasseh Meyer MM 3 - 4)

Policy instruments matter! How governments' choice of policy mixes shape higher education performance in Western Europe

Giliberto Capano (Università di Bologna)

Andrea Pritoni (University of Turin, Italy)

Giulia Vicentini (Scuola Normale Superiore)

Following domestic pressures or international prescriptions, over the last thirty years many national Higher Education Systems (HESs) in Europe have undergone structural changes, mainly meant for enhancing the overall performance – conceived as students' access, quality of teaching and excellence in research – of universities. With regard to this, almost all countries have decided to adopt similar policy design, fostering more organizational autonomy and differentiation, as well as greater managerial steering. However, even though similar policy patterns have been replicated nearly everywhere, indicators of performance still show a remarkable variation across Western European countries. This leads to our main research question: which are the determinants of performance improvement in higher education? So far, neo-liberal economists and policy analysts have been stressing the role of institutional autonomy, competitive funding mechanisms and the assessment of the quality of research and teaching in improving HESs' performances; yet this explanation seems to be an over-simplification of reality. Precisely the fact that similar recipes have produced different outputs in different countries asks for the refinement of taken-for-granted causal explanations. We argue that differences in performance across national HESs depend on the mix between four types of policy instruments – regulation, expenditure, taxation and information – on the one side, and other contextual conditions – namely national policy legacies and traditions – on the other side. We test this expectation(s) with respect to fifteen higher education systems in Western Europe: Belgium (both Flanders and Walloon community), Denmark, England, France, Italy, Netherlands, Northern Ireland, Norway, Portugal, Spain, Sweden, and three German regions: Bavaria, North-Western Westphalia and Saxony. By working on a large data set containing all the changes in the four types of policy instruments underwent in the last 25 years, in order to unravel conjunctural causation, we recur to Qualitative Comparative Analysis (QCA): this methodological approach is indeed very useful in analysing configurations of different conditions leading (or not leading) to a particular outcome (i.e. the improvement of higher education performances).

Understanding Policy Tool Choices: Specificity and Precision as Key Criteria for Instrument Selection

Michael Howlett (Simon Fraser University)

Many taxonomies and typologies exist describing policy instrument varieties and variations but few studies

grapple with the "rationale for tool choice', that is the theoretical, and practical, reasons policy-makers - formulators,

decision-makers and implementors - prefer or select specific kinds of tools. While past studies have focussed on issues

related to policy-maker behaviour, such as ideological predispositions or the lock-in effects of bureaucratic tools, this studies

have difficulty explaining variations in choice and tool innovations. Harkening back to early work on the subject in Canada and the US, this paper suggests that some aspects of the tool itself, notably its ability to be focussed generally or more precisely, is a significant determinant of choice. Some tools are more capable than others in this area and these capabilities and

limitations, it is argued, are well known and essential considerations policy-makers consider in designing

programmes and deciding how best to implement them.

Managing Governance Failures: Universal Coverage Reforms in Indonesia and Mexico

Azad Singh Bali (University of Melbourne)

M Ramesh (LKY School of Public Policy, National University of Singapore)

There is perhaps no other area of public service delivery that is afflicted with as many governance failures as health policy. In this paper we argue that most of these can be managed through an orchestrated use of policy tools that targets the very source of these failures. These tools are designed to shape the economic behavior of key stakeholders in a health system (i.e. users, providers, and third-party payers) by placing a system of counter-weighing incentives and disincentives. We develop a schema of tools that can address these governance failures in healthcare, and highlight their use and non-use in universal coverage reforms underway in Indonesia and Mexico. Our case studies illustrate that the extent to which these tools are incorporated and actively deployed in reforms underway, they can help manage governance failures in the sector which otherwise impede the goals of universal coverage.

Ecotourism Policy Options for the White Water Rafting in Cagayan de Oro River, Philippines: A Multi-Criteria Analysis

Catherine Roween Almaden (Asian Institute of Management)

The primary goal of this policy paper is to determine the policy options on the basis of a multiple criteria analysis related to the regulation of the Cagayan de Oro River White Water Rafting Ecotourism in the Philippines. This study applied the Delphi Method in examining the policy alternatives capable of addressing the challenges of attaining sustainable ecotourism. More specifically, this research determined the criteria necessary for ecotourism policy evaluation. The evaluation of criteria for regulation of the Cagayan de Oro River White Water Rafting Ecotourism may lead to the formulation of better management strategies to protect natural and cultural resources and fulfill broader social objectives. Given the current challenges in attaining in sustainable ecotourism, reflected by sanitation problems, absence of amenities and poor infrastructure, analysis of policy options will improve decision-making and provide sustained revenues for management of the white water river rafting ecotourism sector. Policy options are reviewed as they apply to the Cagayan de Oro River White Water Rafting. Key results suggest the application of combination of policy options such as entrance fees for tourists and permits for operators are most preferred. This policy combination is seen as most appropriate based on the criteria most valued by the respondents which are flexibility of policy criterion, competitiveness issues and environmental effectiveness. An independent administration of the sector by both Local government Units and national agencies is necessary to ensure provision of quality amenities and attainment of sustainable ecotourism sector conform with these criteria.

Which is more effective in education policy, grant or regulation?: The Case of Education Policy in South Korea

NAN-YOUNG KIM (Audit and Inspection Research Institute)

The success of a policy depends on choosing policy tools that work well in complex policy environments and designing them to work well to effective policy implementation. These explanations are common in all policy areas, but they are particularly relevant in education policy, welfare policy, and regulatory policy. There are, however, few studies on how policy tools work, how they affect performance, and which is more effective in diverse and complex policy environments.

This study aims to explore how policy tools work, how they affect performance, and which policy tool is more effective in diverse and complex policy environments by analyzing the case of Creativity Education (hereinafter referred to as CE) policy in South Korea.

In advance I suggest a policy performance model including grant and regulation which are the policy tools most commonly used to accomplish goals in many fields. In this performance model, street level administration variables (e.g. school management effectual with CE, teacher expertise for CE) and environmental variables (e.g. college entrance examination traits, class size, parental support, school district trait) which, as many previous studies have shown, have significant effects on educational policy performance are included.

And then the impact of grants and regulation on policy performance in CE policy is analyzed using both

secondary administrative data and survey data gathered from 191 higher middle school teachers. Also I also interviewed 20 employees with experience related to the implementation in CE policy to find out the relationship among variables and extract valid measurements for each variable.

I use data-based measures as a dependent variable and they are more specific and less likely to generate spurious results following Meier and O'Toole(2013: 446)'s offers to avoid the use of administrators' self-perceptions of performance as a dependent variable. In this research performance variables are "the use of CE teaching methods in class" and "comprehensive performance assessment".

CE policy has been one of the key education policies in many countries including South Korea since the 1990s. While South Korean education has been praised for both its role in economic development and its comparatively high international performance rankings (OECD, 2009; 2011a; 2013), there are growing worries that the education system hinders the development of the students' creativity. That is, Korean high school education system represented by one-sided lectures by teacher and student assessment by multiple choice questions may no longer be effective in the era of information technology and globalization. To solve the problems, with the inauguration of the Lee Myung-bak Government in 2008, CE Policy was introduced in order to foster globally creative humans throughout the elementary and secondary school levels.

This research fits with the panel topic because this research explores theoretically and empirically the way how policy tools work, how they affect performance, and which is more effective in diverse and complex policy environments to give some implication to address the different types of behavior that often lie at the source of the problem for a concert of tools.