



ELSEVIER

Available online at www.sciencedirect.com

SCIENCE @ DIRECT®

Journal of Economic Psychology 26 (2005) 73–87

JOURNAL OF
**Economic
Psychology**

www.elsevier.com/locate/joep

Factors in lay preferences for government or private supply of services

Michelle S. Mahoney^a, Simon Kemp^{b,*}, Paul Webley^a

^a *School of Psychology, University of Exeter, Exeter, UK*

^b *Department of Psychology, University of Canterbury, Private Bag 4800, Christchurch, New Zealand*

Received 19 November 2002; received in revised form 1 December 2003; accepted 18 December 2003

Available online 28 February 2004

Abstract

Three studies investigated how New Zealanders' and English citizens' preferences for whether services should be supplied privately or by the government related to the nature of the service. In Study 1 participants indicated aspects of the service they thought important for their supply preferences. Study 2 presented participants with scenarios in which aspects of the service were systematically manipulated and found that if the service was related to health, if the number wanting or needing it was high, if the service produced a negative externality, and if supplier was a monopoly, the preference for government supply was significantly increased. In Study 3, participants were presented with different services and their preferences for government supply were found to be increased if they rated the service as having few suppliers and if the service was rated as important for health. Overall, the relevant aspects of the service for deciding whether lay people would prefer government supply appear similar to those that determine when they would like scarce goods to be distributed by regulation rather than by the market. Lay people's preferences take into account some but not all of the factors suggested as relevant by economic theory.

© 2004 Elsevier B.V. All rights reserved.

JEL classification: H40

PsycINFO classification: 3040

Keywords: Government supply; Public goods; Privatisation; Lay economics

* Corresponding author. Tel.: +64-3-3642902; fax: +64-3-3642181.

E-mail address: simon.kemp@canterbury.ac.nz (S. Kemp).

1. Introduction

Many goods and services might be supplied by either the government or by private enterprise. This paper investigates how lay people's preferences for who should supply the services are influenced by some of the characteristics of the services.

Over the last twenty years or so, governments at both the national and local levels have often opted to move the supply of services from the government to the private sector. The main motivation for this move has been theoretical or ideological, and often derived from the perception that economic theory suggests such services are better supplied via the market system. (For discussions by economists of the issues, see, e.g., Blomquist & Christiansen, 1999; Harris & Seldon, 1979; Gouviea, 1997; Samuelson, 1955; Stiglitz, 1988.)

In contrast to the relative abundance of economic theory concerning the merits of government and private supply of services, there has been little research done on what people would actually prefer. This apparent lack of interest in the empirical side of the question may in part reflect the belief that people's preferences on the supply of goods and services by the government are revealed by how they vote in elections (e.g. Schram, 1991). However, there is a good deal of research indicating that how people vote at elections is largely determined by the present state of the economy and rather little by factors relating to the supply of goods and services by the government (e.g. Alvarez, Nagler, & Willette, 2000; Funk & Garcia-Monet, 1997; Harris & Seldon, 1979; Kemp, 2002, Chap. 3; Price & Sanders, 1995).

Broadly speaking, two sets of variables affect how people think about whether a particular service should be supplied by the government or privately: variables related to the characteristics of the person (individual differences) and variables related to the characteristics of the service. In the present paper we concentrate on the latter. There were two reasons for this choice.

First, previous research indicates that individual differences in preferences for a particular mix of public services (e.g. whether someone would like more spent on defence or health) are poorly predicted by standard attitudinal and demographic variables (e.g. De Groot & Pommer, 1989; Kemp & Willetts, 1995; Tan & Murrell, 1984). In the only previous study that we have located on preferences in who should supply services, Thompson and Elling (2000) surveyed residents of the state of Michigan, and found a majority in favour of government provision for 10 of the 14 services. Regression was used to predict support for privatisation from a range of demographic variables. Overall, privatisation was more likely to be preferred by those with higher incomes, whites, and Republican supporters, but the overall predictive power of the regression equation (accounting for 5.9% of the variance) was low.

Second, and more important, both economic theorising and previous empirical research suggest features of the services that might be important in people's preferences. Stiglitz (1988), for example, states the economists' case that government supply or regulation of goods and services may be called for in cases of market failure. Such failures may arise when the service is a "public good", when externalities are involved, where the provider is a monopoly, where the market is incomplete,

where there is information failure and the consumer has difficulty in evaluating the service, or when the service provided has the characteristics of a merit (in the case of regulation, demerit) good. A similar list is given by Samuelson (1955).

A public good is one which has properties of non-rivalry and non-excludability. The control of mosquitoes is an example, since mosquitoes will not selectively attack those who have failed to contribute to their control (Buchanan, 1968). Other common cited examples include buskers (who usually enhance the quality of life of all around them), defence and the provision of lighthouses. Externalities occur when those other than the producer or consumer of the good or service incur either a cost (negative externality) or benefit (positive externality). Environmental pollution is probably the most commonly studied externality. Incomplete markets arise when goods and services that are demanded are for some reason not supplied by the market. A merit good is one which is not consumed as much as would be good for the consumer; a demerit good is one which is over-consumed. A commonly cited example of the former is physical exercise; the latter are often believed to include cigarettes and heroin.

These considerations, which arise out of economic theorising (for further discussion of them, see, e.g., Kemp, 2002, Stiglitz, 1988), give rise to obvious hypotheses about the circumstances in which lay people might prefer to see services supplied by the government rather than through the market system. So, for example, it may be that lay people take into consideration whether a supplier has a monopoly when they consider whether the supplier should be a government or private.

Another source of hypotheses comes from research that has considered how people would like to allocate scarce goods (Kemp, 1996, 1998; Kemp & Bolle, 1999). Important factors inclining people towards regulation rather than market supply include whether the good is important for people's health, whether it is seen to be a necessity rather than a luxury, whether it is wanted by many people rather than a few, and whether there is one rather than many producers. It seems plausible that such factors might also be influential in people's preferences for whether the government or the private sector should supply services under normal circumstances.

The three studies are reported below. In the first study, respondents were asked to rate the importance of various factors in determining whether services should be supplied by government or private enterprise. These factors were for the most part from the economic theory and previous research outlined above. In the second study, respondents were confronted with scenarios and asked to rate their preference for government or market supply in each case. In this study we aimed to see whether four of the factors identified as important in Study 1 when services in general were considered would retain this importance when respondents considered a more concrete situation. Finally, in Study 3, respondents were confronted with 25 specific services (e.g. electricity distribution) and asked to rate them on six of the factors found important in Study 1 as well as indicating who they thought should supply the service. We then examined how their supply preference related to these factors. Thus, as in Study 2, respondents were required to consider specific services rather than services in general.

2. Study 1

The aim of this study was to establish which aspects of services lay people consider most important when deciding how they would prefer their services to be supplied.

2.1. Method

Participants rated 18 aspects of services with respect to their importance for deciding whether a service should be supplied privately or by the government. The questionnaire defined the two methods of supply for the participants as follows:

Government supplied: “The service is provided by the government. Money to set the service up (e.g. the buildings etc.) comes out of taxation or government borrowing. The people who manage the service are ultimately responsible through a cabinet minister to parliament. Some government-run organisations charge full costs to the user for the services they provide, some charge part of the cost, others provide the service free of charge”.

Privately supplied: “The service is provided and run by private individuals or companies. Money to set the service up (e.g. the buildings etc.) comes from investments by private individuals or companies. The people who manage the service are responsible to the shareholders or others who contribute money. Privately run organisations are often subject to some form of regulation (e.g. health inspectors of restaurants). Not all privately run organisations are supposed to make a profit. Usually privately run organisations charge the full cost of providing the service”.

The 18 aspects (see Table 1¹) were generated from economic theory and previous research (as outlined above). In addition, aspects to do with safety, expense and the value to users were suggested during a small pilot study. Participants were asked to rate on a 1–5 scale (1 = not important at all, 5 = extremely important) how important each of the 18 aspects would be when making a decision about how they would prefer a service to be supplied. They were then asked to pick the three aspects they thought would be most important in the decision. Finally, participants were asked to rate each of the 18 aspects with respect to how they would prefer a service to be supplied if it featured that particular aspect. If, for example, a service was necessary for someone’s health, would they prefer that service to be supplied privately or by the government? They were asked to rate these preferences on a simple three-point scale (1 = ‘government run’, 2 = ‘makes no difference’ or 3 = ‘privately run’). The same ordering of the 18 aspects was used for all the tasks.

Postgraduate students were recruited and paid to administer the questionnaires to their acquaintances, with the proviso that none of the participants be students. The administrators were instructed to try to obtain both male and female participants

¹ Descriptions of variables here have been given their technical terms. In the questionnaires terms such as ‘public good’, ‘merit good’ and ‘negative externalities’ were not used, instead the concepts were described in lay-person’s terms.

Table 1

Averages (and standard deviations) from ratings of importance and percentage ratings of highly important (scores 4 and 5). Percentage ratings of the variables as one of the three most important variables and average inclinations

Aspects of services	Mean importance (SD)	% rating as highly important	% rating as 1 of 3 most important	Mean inclination
Necessary for health	4.53 (0.51)	100	56	1.35**
Necessary for safety	4.32 (0.93)	87	47	1.39**
Necessity rather than luxury	4.16 (0.76)	92	26	1.32**
Everyone (versus few) wants or needs it	4.03 (1.03)	79	38	1.45**
Possible danger	4.03 (1.17)	48	21	1.79
Necessary for education	3.97 (1.0)	74	24	1.37**
Negative Externalities	3.82 (1.06)	63	32	1.53**
Public good	3.61 (1.24)	67	21	1.61**
One supplier	3.50 (1.16)	55	9	1.68*
Really valued by users	3.47 (1.13)	58	0	1.92
Enables communication	3.24 (1.32)	49	6	2.03
Not easy for average person to identify problems	3.24 (1.14)	46	3	1.82
Use it personally	3.11 (1.57)	32	3	2.11
Expensive to run	2.63 (1.17)	26	6	2.14
Makes a substantial profit	2.55 (1.11)	21	0	1.95
Positive externalities	2.32 (1.02)	16	3	2.08
Merit good	2.26 (1.13)	16	0	2.18
Demerit good	2.24 (1.16)	22	3	2.18

Notes: Mean importance: 1 = not important at all; 5 = extremely important “% rating as highly important” gives the percentage of respondents rating the aspect as either 4 or 5. Values under 2 in the Mean inclination column indicate an average tendency to favour government supply under this aspect. Inclination codings were: 1, favour government; 2, makes no difference; 3, favour private supply. The results of binomial tests conducted to establish significant preferences for a type of supply are shown: * $p < 0.05$; ** $p < 0.01$. (For this analysis, “makes no difference” responses were excluded.)

over a range of ages. Thirty-eight questionnaires were completed, 19 by males and 19 by females. The median age of the sample was in the range 45–54 years. Participants were given \$3 worth of scratch lottery cards (with a variety of cash prizes available) as a token of appreciation. Questionnaires were completed under the supervision of the administrators and usually at the participants’ homes.

2.2. Results and discussion

Results of the study are shown in Table 1. For the most part it is noticeable that the three measures of the importance of the factors produce rather similar results. For example, “necessary for health” received the highest mean importance rating, was rated 4 or 5 in importance by all the respondents, was chosen as one of the three most important considerations by over half the sample, and received the second

lowest mean inclination score. The agreement among the three measures also serves as an indication that there was reasonable consensus among the sample.

Overall, the importance of the service for people's health and safety (or whether there is possible danger); whether it is a necessity rather than a luxury; the number of people wanting it; whether it is important for education; and whether it has negative externalities or the characteristics of a public good were identifiable as important factors for the choice.

3. Study 2

Study 2 presented participants with different scenarios in which either a health good or a necessary good for an automobile were to be supplied. Four of the important variables identified in Study 1 were systematically manipulated in this study. The hypothesis was that each of these variables would have a significant effect (in the direction predicted from Study 1) on the preference for government versus private supply of the good. Thus, this study was an attempt to replicate some of the findings of Study 1 in a situation where respondents were required to consider a particular good and where a within-subjects experimental design was employed.

3.1. Method

The variables manipulated in the scenarios were:

1. Whether the service related to health or not. In the health condition the scenarios read: "A new disease emerges. Sufferers are bed ridden for several weeks though there are few deaths". In the non-health condition the scenarios read: "A new microbe emerges which attacks car tyres". In both cases a treatment was available, either a drug or a chemical, which could kill the microbe or cure the disease in the car or person overnight.
2. Whether everyone or only a few people want or need the treatment (if the disease, or microbe, was widespread or rare).
3. Whether there are several importers and suppliers of the treatment or only one.
4. Whether production and supply of the treatment would involve the use of polluting chemicals such as chlorofluorocarbons (CFC's) or not (i.e. negative externalities).

Thus, four factors identified in Study 1 were manipulated in this study: necessity for health, the number of people wanting the service, the number of suppliers, and the presence of negative externalities. The choice of factors was partly motivated by their apparent importance in Study 1 and partly because the different factors had to combine plausibly. For example, it is difficult to present a service as necessary for people's health and a luxury at the same time. The restriction to four variables kept the questionnaire at manageable length while presenting each combination of the variables (i.e. the fixed factors were crossed).

The different combinations of these four variables made up 16 ($2 \times 2 \times 2 \times 2$) different scenarios. The questionnaire began with the same definitions of government supplied and privately supplied services as in Study 1. Participants were then presented with each scenario in turn and asked to rate how they would prefer the service in each scenario to be supplied on a seven-point scale (1 = completely favour private supply; 4 = A 50:50 mixture; 7 = completely favour governmental supply). A pilot study showed that participants favoured a 50:50 mixture as a mid-point to the scale.

Two different versions of the questionnaire presented different random orders of the scenarios.

The same participant recruitment and payment procedure was used as in Study 1, and 21 males and 9 females participated. The median age of the sample was in the range of 25–34 years.

3.2. Results and discussion

Overall, there was no significant difference between the two orders of presentations of scenarios ($F(1, 28) = 1.31$, n.s.). Therefore the results from the two questionnaires were combined.

Table 2 shows the average preferences for the two conditions of each variable. Note that the difference between the means is greatest for the variables of health and number wanting the service. These two variables therefore had greater importance for determining preference for government or private supply than the other two, just as they did in Study 1 (cf. Table 1). Note, too, that all the preferences were in the same directions as found in Study 1. For example, if a service is necessary for people's (rather than their car's) health, government supply is more preferred.

Analysis of variance found significant main effects of all four independent variables in this study: Everyone (or a few) wants or needs the service ($F(1, 29) = 23.4$, $p < 0.01$); Health ($F(1, 29) = 12.8$, $p < 0.01$); Presence of negative externality ($F(1, 29) = 14.2$, $p < 0.01$); Number (one or many) of suppliers ($F(1, 29) = 8.5$, $p < 0.01$). There was also a significant two-way interaction between the number of suppliers and the variable 'everyone wants or needs the service' ($F(1, 29) = 5.4$, $p < 0.05$). Examination of the means for this interaction showed that if everyone wanted or needed the service (instead of a few people) there was a relatively greater preference towards governmental supply when there was only one rather than several

Table 2
Average preference score under different versions of the scenarios (standard deviations shown in parentheses)

Variable	Conditions	
Health	Disease: 4.60 (0.27)	Car: 3.38 (0.23)
Number wanting	Everyone: 4.60 (0.24)	Few: 3.38 (0.27)
Negative externality	CFC: 4.30 (0.25)	No CFC: 3.68 (0.23)
Number of suppliers	One: 4.26 (0.23)	Several: 3.72 (0.25)

suppliers of the service: People wanted the government to be the monopoly supplier rather more if everyone, rather than a few, wanted or needed the service.

4. Study 3

Study 3 presented respondents in both New Zealand and England with a number of different services that were supplied by governments, the private sector, or a mixture of the two, and asked their preference for how the services should be supplied. Respondents were asked to rate the services for the presence of six of the factors identified as important in Study 1, and then regression analysis was used to identify the weighting of these factors in their overall supply preference.

4.1. Method

The questionnaire began with the same explanations of government and private supply of services as Studies 1 and 2. The following eight pages then presented the participants with a list of different services. The choice of services was made so that some (e.g. fire services, national defence) were supplied wholly by local or central government at the time of the study, some were supplied wholly by private enterprise (e.g. bakeries, banks), and some by both means (e.g. hospitals, electricity distribution). Participants were asked to rate each of 25 services on a seven-point scale according one each of six different aspects of services. The actual services presented and details of the rating scales used are shown in Table 3. Each page of the questionnaire presented a different aspect. The six aspects were:

1. How much each service is “necessary for people’s health”.
2. How “many people you feel want or need each service”.
3. How “many suppliers you think there are for each service in New Zealand (England)”.
4. Negative externalities: How much each of the services “produces bad things as a by-product of running the service, that affect everyone, yet compensations for the effects are not covered in the cost of supplying the service (e.g. pollution)”.
5. Public Goods: How much the services are “ones that everyone can benefit from and no-one can be excluded from using (e.g. the police force, beautiful front gardens to walk past)”.
6. To what extent the services are “necessary for people’s education”.

The pages featuring these six variables were given a different random order in each questionnaire and the questionnaires were randomly distributed to participants. The order of presentation of the services within each page, however, was unchanged.

On the seventh page, participants were again presented with the 25 services and asked to rate how satisfied they were currently with each service on a seven-point scale. (A question about satisfaction was not included in the previous studies as these featured no specific services with which the participant could be satisfied or

Table 3
Mean scores from Study 3 – New Zealand sample

Service	Health	Educate	Public good	Negative externality	No. of suppliers	No. wanting	Current satisfaction	Preference
National defence	4.5	5.1	2.6	4.2	6.0	3.0	4.3	6.6
Fire service	2.0	4.8	1.6	5.6	6.0	1.4	2.0	6.2
Water distribution	1.4	3.7	1.6	5.5	5.1	1.2	1.9	6.0
Universities	4.0	1.3	4.0	4.8	3.8	3.1	3.6	5.9
Road maintenance	3.4	4.8	2.0	4.6	3.8	1.9	3.5	5.7
Rubbish collection	2.2	4.9	1.9	4.2	4.7	1.6	2.1	5.3
Prisons	3.8	4.4	3.6	3.7	5.2	3.3	4.3	5.2
Hospitals	1.2	3.4	2.2	4.9	3.6	1.3	4.2	5.2
Postal service	5.1	3.6	2.3	5.6	5.6	1.9	2.7	5.0
Electricity distribution	2.1	3.3	3.0	4.3	3.6	1.2	4.2	4.6
Museums	6.0	2.9	3.3	6.5	4.2	4.2	2.8	4.9
Legal aid	4.5	4.6	3.7	5.3	3.6	3.8	3.8	4.4
Doctors	1.2	3.5	3.1	5.2	1.8	1.3	2.8	3.7
Buses	4.6	4.5	3.7	3.7	2.9	3.2	2.7	3.7
Telephone communication	3.0	2.7	2.7	4.6	4.7	2.0	2.5	3.0
Swimming pools	4.6	4.7	3.5	5.5	2.2	4.2	2.8	2.9
Film making	6.0	4.0	4.5	5.2	4.5	4.4	3.5	2.6
Banks	5.0	3.9	3.7	5.0	3.0	2.3	3.6	2.6
Airlines	4.7	4.6	4.8	3.7	4.7	3.3	3.3	2.3
Veterinary services	4.1	5.1	3.9	5.6	1.8	3.5	2.3	2.2
Buying and selling houses	5.8	6.0	4.5	5.2	2.0	3.5	3.5	2.1
Newspapers	4.7	2.4	3.2	4.7	3.0	2.6	2.2	2.0
Dentists	1.6	3.7	3.6	5.1	1.8	1.7	3.0	1.9
Bars and pubs	5.5	5.8	4.5	3.1	1.4	3.6	3.5	1.5
Bakeries	5.2	5.8	3.5	5.3	1.8	3.5	3.0	1.4

Notes: *Health*: 1 = service is absolutely necessary for health, 7 = not necessary at all. *Education*: 1 = absolutely necessary for education, 7 = not necessary at all. *Public good*: 1 = public good, 7 = private good. *Negative externalities*: 1 = large amount produced, 7 = none. *Number of suppliers*: 1 = lots of suppliers, 7 = one supplier. *Number who want or need*: 1 = everyone, 7 = few. *Current satisfaction*: 1 = very satisfied, 7 = very dissatisfied. *Preference*: 1 = private supply, 7 = governmental supply.

dissatisfied.) On the final page, participants were asked who they would prefer to supply each service, the seven-point scale in this last question being the same as in Study 2.

Two different samples were obtained. The same questionnaire distribution and payment procedure was used as in Study 1 for both samples. The New Zealand sample contained 14 males and 15 females, with median age in the range 25–34 years. The English sample contained 10 males and 23 females, with median age in the range 45–54 years. The ages of the sample were thus somewhat different, and it is likely that the UK participants thus experienced more actual changes to service provision.

4.2. Results

The mean ratings for each variable for each service are shown in Table 3 (New Zealand) and Table 4 (England). Standard deviations for the different variables in the New Zealand sample (calculated over respondents for each service separately and then averaged) were: Health, 1.60; Education, 1.66; Public Good, 1.77; Negative externality, 1.52; Number of suppliers, 1.47; Number wanting or needing, 1.14; Current satisfaction, 1.36; and Preference for supplier, 1.56. These figures indicate that there was reasonable consensus between the respondents on how the different variables are related to each service. Also, interestingly, there was a similar consensus in preferences for who should supply the services to the consensus for the other, apparently more objective variables. (This follows from the similarity in standard deviations.) The English sample showed similar results.

The strongest preferences for governmental supply were shown for national defence and the fire service (means of 6.62 and 6.24 respectively in New Zealand and 6.15 and 5.97 in England). The strongest preferences for private supply were shown for bars and pubs, and bakeries in New Zealand (means of 1.45 and 1.41 respectively). In England it was for bakeries, newspapers and bar and pubs (means of 2.24, 2.21 and 1.97 respectively). These are consistent with current methods of supply in both New Zealand and England and, indeed, overall there is something of a tendency for people to favour current practice.

However, looking at the satisfaction ratings showed that in some cases, despite high satisfaction, participants did not prefer the current practice of supply. Participants were most satisfied with the service of water distribution in New Zealand, and preferred governmental supply of it, as is currently the practice in New Zealand. In England participants were most satisfied with the telephone communications and water distribution, but, despite this satisfaction with the water distribution (which is currently privately supplied), they preferred governmental supply. There are different possible reasons for this. Participants may be satisfied with the reliability of the service, but still prefer governmental supply because prices have risen since privatisation. Alternatively, there may be a desire that the state ensures basic human needs, so that these are free from the pressure and risk of market forces. The service with which participants were most dissatisfied was the prison service in New Zealand. In England, buses produced most dissatisfied with the prison service next. The preference in both was for governmental supply which is the current practice. A few other services

Table 4
Mean scores from Study 3 – English sample

Service	Health	Educate	Public good	Negative externality	No. of suppliers	No. wanting	Current satisfaction	Preference
National defence	2.9	5.0	2.7	3.6	4.9	2.7	4.0	6.2
Fire service	1.4	4.6	1.3	5.2	4.3	1.2	2.6	6.0
Legal aid	3.7	5.2	4.7	6.2	4.3	3.6	4.2	5.8
Rubbish collection	1.5	5.7	1.8	3.1	3.8	1.3	3.2	5.8
Universities	3.4	1.8	4.5	5.2	3.6	3.9	3.4	5.7
Prisons	3.3	4.8	2.9	4.2	4.0	2.9	4.6	5.7
Road maintenance	2.8	5.3	3.0	3.6	3.8	2.5	4.5	5.6
Dentists	1.3	4.1	2.1	5.0	2.6	1.2	3.6	5.5
Doctors	1.3	3.7	1.7	5.0	2.4	1.2	3.5	5.5
Hospitals	1.0	3.9	1.7	3.5	3.3	1.3	4.2	5.3
Postal service	3.0	3.3	2.3	5.5	4.3	1.8	3.0	5.2
Museums	5.5	3.1	3.4	6.1	4.5	5.1	3.1	5.2
Water distribution	1.3	4.2	1.6	4.5	3.9	1.3	2.7	5.0
Electricity distribution	1.7	4.4	2.0	3.3	3.4	1.4	2.8	4.8
Swimming pools	4.3	4.5	4.1	4.7	3.6	4.4	3.8	4.2
Buses	3.4	4.9	3.6	3.0	3.7	3.6	4.6	4.0
Veterinary services	3.7	5.4	4.1	5.2	2.7	3.7	3.4	3.7
Telephone communication	2.4	2.9	2.9	4.4	3.1	1.7	2.5	2.5
Banks	4.7	5.2	3.7	5.7	3.0	2.8	3.9	2.9
Airlines	4.9	6.0	4.5	2.5	3.7	4.0	3.3	2.8
Buying and selling houses	5.2	5.9	5.0	6.1	3.3	4.2	4.4	2.5
Film making	5.6	4.1	4.6	5.2	4.1	4.6	3.1	2.4
Bakeries	4.6	6.3	3.4	4.9	2.9	3.7	3.0	2.2
Newspapers	4.9	3.4	3.6	4.1	3.0	4.0	3.2	2.2
Bars and pubs	5.4	6.3	4.3	4.4	2.4	3.9	3.1	2.0

Notes: Direction of scores as Table 3. Legal aid no longer exists in England.

Table 5

Average and standard deviations of beta-weights (β) from 61 individual regressions of both NZ and English participants in Study 3

Variable	Mean	SD
Health	−0.29***	0.37
Education	−0.07*	0.26
Public good	−0.07	0.40
Amount of negative externalities	0.04	0.22
Number of suppliers	0.24***	0.31
How many want or need it	0.00	0.41

Notes. β significantly different from zero by a single-sample *t*-test: * $p < 0.05$; *** $p < 0.001$.

The average R^2 value was 0.55 (SD = 0.16).

received preferences that differ from the current method of supply. For example, in New Zealand swimming pools are mainly supplied by local government and although satisfaction was quite high the average preference was for private supply.

The relationship between supply preference and the six factors was determined by regressing the supply preference rating on the ratings of health, education, public good, negative externalities, the number of suppliers, and how many people want or need the service. (Current satisfaction was omitted from this analysis because the relationship between it and preference for government or private supply was likely to be heavily influenced by the respondents' perceptions of current practice.) Separate regressions were carried out for each respondent in both samples (i.e. the different services comprised the random variable). The averages of the beta weights from the 61 individual regressions are shown in Table 5. This analysis suggests that necessity for health, number of suppliers, and necessity for education were the most important variables for predicting preferences for government supply.

We also investigated for differences in beta-weights between the two samples. We found no significant differences (one-sample *t*-test, $p < 0.05$) for any factor except the number of suppliers where New Zealand respondents recorded a higher average beta-weight (0.34) than British respondents (0.14; $t(56) = 2.58$, $p < 0.05$). This result may reflect New Zealand's considerably smaller population and its market's correspondingly greater propensity to be dominated by monopoly suppliers. However, the average beta-weight for the British sample alone was also significantly different from zero and second in size only to that obtained for the health factor.

5. General discussion

The three studies investigated important variables that affect people's preference for how they would like their services to be supplied. Overall, the results of Studies 1 and 2 are in quite close agreement with each other, indicating as they do that health considerations, the number of people wanting the service, the number of suppliers, and the presence of negative externalities powerfully incline people towards preferring government supply of a service. Indeed, the order of importance of these four variables was the same across these two studies.

The pattern of results shown in Study 3 differs a little from that found in the previous two, but health was still the most important predictor of preference, and the number of suppliers was again significant.

It is possible that the differences between Study 3 and the previous two studies arose because the presentation of a range of services in Study 3 refocused people's minds on a full range of services, instead of merely on services whose privatisation has been recently undertaken or is currently being contemplated. So, for example, it is unlikely that anyone has seriously thought about whether either the New Zealand or the British government should take over running bakeries and newspapers or that defence should be privatised.

Overall, the results of the three studies presented here are in reasonable agreement with the results of previous research into whether people would prefer scarce goods to be distributed by regulation or via the market system. Thus, people would prefer the government to supply goods or would prefer to see scarcities dealt with by regulation when the producer or supplier has a monopoly, when health is an important issue and when a large number of people want or need the service.

How do the variables that seem to be important in the preferences of the lay people we questioned relate to the issues put forward by economists for government involvement in the economy?

To deal firstly with the similarities, the micro-economic theory of monopoly might be thought to provide a good theoretical basis for the evident distrust of the New Zealand public for leaving monopolies in private hands. Similarly, government intervention of some kind to deal with negative externalities is evidently approved by both the public and many economists.

But there are also marked differences in the concerns. Whether a service constitutes a public good in the sense defined by economists (a crucial part of economic theory in choice of supplier) does not seem to be a crucial factor for the general public. Equally, the concern of the New Zealand and English public that the government be involved in the supply of education and health services does not appear to be rooted in economic theory. Of course, it would be unwise to put too much weight on the results of a few small-scale studies carried out in two countries, but these conclusions are also supported by other research.

Surveys conducted with representative samples in a number of different countries have found that people want more government spending on education and health (e.g. Ferris, 1985; Kristensen, 1982; Lewis & Jackson, 1985; Smith & Wearing, 1987; Zanardi, 1996). Similarly, examination of the results of these surveys suggests that the public is not particularly concerned with whether the service is actually a public good or not. So, for example, it is frequently found that the public wants less spent on defence but more or about the same on law and order, both of which appear to be public goods (Kemp, 2002).

Why then should people want things to be supplied by the government when economic theory would suggest they should be supplied by the market? In terms of Maslowian theory, health is one of the key basic needs. There is a moral argument here, that everyone should be entitled to basic human needs (e.g. Berry, 1994), although this argument has also been carried out over into economics (e.g. Lutz, 1999;

Lutz & Lux, 1979). People perhaps feel safer with the idea of governmental supply, perceiving it as less risky and more equitable than leaving the supply of an essential service to the market, and, indeed, previous research suggests that people would prefer to see necessities that are in short supply distributed by regulation rather than left to the market system (Kemp, 1998). In terms of prospect theory, the cost of a potential loss of basic human needs (however accurate or inaccurate the perception of this risk) may be greater than the potential gain from leaving supply to the market. The post-war Labour government in the UK and the start of the National Health Service was underpinned by this ideology that the state should provide basic needs for all. Policies presented to the contrary are often controversial and attempts to appeal to voters that are based on economic arguments are confronted by moral and ideological objections. This might also explain why voters in England and Wales, despite being satisfied with water distribution, would prefer a governmental supply, as water is another basic need. The cost of market failure is too great a risk. Economic survival is not guaranteed and people may feel that the state is a safer alternative. The idea resembles Roy's safety first principle (1952) that individuals seek to reduce the risk of catastrophes occurring rather than merely maximising their expected utility function. However, this result may also have arisen because prices have risen since privatisation.

The role of current satisfaction in predicting people's preferences requires further investigation to examine its exact place and influence in the decision process. Tan and Murrell (1984) examined this aspect but concluded that its role was extremely complex and maybe multidimensional. Again, however, it is a variable that is largely ignored in economic theory, although in practice the rule of "if it ain't broke, don't fix it" is as important in political decision-making as in many other areas.

Williamson and Wearing (1996) comment on the complexity of lay people's thoughts about the economy and preferences towards expenditure, and remark that this complexity is not easily captured in questionnaire studies of the type we carried out. The concepts used and combined here such as health, safety and danger, or necessity and the number of people wanting or needing the service could be explored further, perhaps with some qualitative work to examine how they interact and affect people's preferences.

Acknowledgements

The authors would like to thank the Economic and Social Research Council for helping to fund the research.

References

- Alvarez, R. M., Nagler, J., & Willette, J. R. (2000). Measuring the relative impact of issues and the economy in democratic elections. *Electoral Studies*, 19(2/3), 237–253.
- Berry, C. J. (1994). *The idea of luxury: A conceptual and historical investigation*. Cambridge: Cambridge University Press.

- Blomquist, S., & Christiansen, V. (1999). The political economy of publicly provided goods. *Journal of Public Economics*, 73, 31–54.
- Buchanan, J. M. (1968). *The demand and supply of public goods*. Chicago: Rand McNally.
- De Groot, H., & Pommer, E. (1989). The stability of stated preferences for public goods: Evidence from recent budget games. *Public Choice*, 60, 123–132.
- Ferris, J. M. (1985). Interrelationships among public spending preferences: A micro analysis. *Public Choice*, 45, 139–153.
- Funk, C., & Garcia-Monet, P. (1997). The relationship between personal and rational concerns in public perceptions about the economy. *Political Research Quarterly*, 50, 317–342.
- Gouviea, M. (1997). Majority rule and the public provision of a private good. *Public Choice*, 93, 221–244.
- Harris, R., & Seldon, A. (1979). *Over-ruled on welfare*. London: Institute of Economic Affairs.
- Kemp, S. (1996). Preferences for distributing goods in times of shortage. *Journal of Economic Psychology*, 17, 615–627.
- Kemp, S. (1998). Perceiving luxury and necessity. *Journal of Economic Psychology*, 19, 591–606.
- Kemp, S. (2002). *Public goods and private wants: A psychological approach to government spending*. Cheltenham, UK: Edward Elgar.
- Kemp, S., & Bolle, F. (1999). Preferences in distributing scarce goods. *Journal of Economic Psychology*, 20, 105–120.
- Kemp, S., & Willetts, K. (1995). The value of services supplied by the New Zealand government. *Journal of Economic Psychology*, 16, 23–37.
- Kristensen, O. P. (1982). Voter attitudes and public spending: Is there a relationship? *European Journal of Political Research*, 10, 35–52.
- Lewis, A., & Jackson, D. (1985). Voting preferences and attitudes to public expenditure. *Political Studies*, 33, 457–466.
- Lutz, M. A. (1999). *Economics for the common good: Two centuries of social economic thought in the humanistic tradition*. London: Routledge.
- Lutz, M. A., & Lux, K. (1979). *The challenge of humanistic economics*. Munlo Park, CA: Benjamin/Cummings.
- Price, S., & Sanders, D. (1995). Economic expectations and voting intentions in the UK, 1979–1989. A pooled cross-section approach. *Political Studies*, 43, 451–471.
- Roy, A. D. (1952). Safety first and the holding of assets. *Econometrica*, 20(3), 431–449.
- Samuelson, P. A. (1955). Diagrammatic exposition of a theory of public expenditure. *The Review of Economics and Statistics*, 37, 350–356.
- Schram, A. (1991). *Voter behaviour in economic perspective*. Berlin: Springer.
- Smith, R., & Wearing, M. (1987). Do Australians want the welfare state? *Politics*, 22(2), 55–65.
- Stiglitz, J. E. (1988). *Economics of the public sector* (2nd ed.). New York: Norton.
- Tan, G., & Murrell, S. (1984). Respondent characteristics in citizen evaluations of municipal services. *Social Indicators Research*, 14(1), 29–52.
- Thompson, L., & Elling, R. C. (2000). Mapping patterns of support for privatization in the mass public: The case of Michigan. *Public Administration Review*, 60(4), 338–347.
- Williamson, M. R., & Wearing, A. J. (1996). Lay people's cognitive models of the economy. *Journal of Economic Psychology*, 17, 3–38.
- Zanardi, A. (1996). The distribution of benefits of public expenditure programmes: Evidence from Italy from a budget game experiment. *Public Finance*, 51, 393–414.