Fairness and pressure group competition

Fridrik Mar Baldursson

Address: Fridrik Mar Baldursson
Department of Economics
University of Iceland

Email: fmbald@hi.is
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By

Fridrik Mar Baldursson
Department of Economics
University of Iceland

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Abstract
This paper is motivated by recent events in Iceland: the attempt by Iceland’s largest bank to take over a savings bank. Shortly after the deal was announced Parliament quickly and unanimously passed a law which blocked it by creating a hold-up situation for the savings bank board. It is argued that the strong support for the law is puzzling in light of theories of pressure groups and privatisation. In the paper this puzzle is explained by using a framework for analysing competition between pressure groups taking fairness considerations into account. In the model the government may liberalise policy to enhance efficiency. Due to existing property rights, one group (A) will benefit disproportionately from liberalisation. Another group (B) suffers as a consequence of liberalisation. The groups can employ direct (lobbying) and indirect (influencing public opinion) methods to fight for political influence. If group B is more effective at convincing the public that the result of liberalisation leads to unfair gains for group A than the latter is at arguing that they deserve these gains, then the former group may slow down liberalisation, even if group A should be more successful based on traditional theories of pressure group competition.

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Address:
Professor Fridrik M. Baldursson
Department of Economics
University of Iceland
101 Reykjavik
ICELAND

fmbald@hi.is
www.hi.is/~fmbald
Tel. +354 525 5273
Fax + 354 552 6806
1. Introduction

This paper is motivated by recent events in Iceland: the attempt by Iceland’s largest bank to take over a savings bank. Shortly after the deal was announced Parliament quickly and unanimously passed a law which blocked it by creating a hold-up situation for the savings bank board. I argue that the strong support for the law is puzzling in light of most existing theories of pressure groups and privatisation. This puzzle is studied by using a framework for analysing competition between pressure groups taking fairness considerations into account.

It has become increasingly clear in the last couple of decades that equity, fairness and reciprocity play an important role in decisions of individuals (see e.g. Konow, 2003). However, mainstream economics has mostly ignored this evidence so far and continues to rely more or less exclusively on the usual rational choice paradigm. One reason for this is probably that although there are several proposals for an alternative framework – see e.g. Fehr and Schmidt (2000) and Camerer (2003) – no paradigm has yet emerged as a consensus replacement for rational choice. Another reason for the slow diffusion of alternative paradigms is that formal analysis of models involving fairness or reciprocity proxies tends to be more difficult than analysis relying on the simpler utility maximization of homo oeconomicus.

The Icelandic episode referred to above was described and analysed in some detail in Baldursson (2004). There, I argued that the outcome of the special interest group competition observed did not conform to relevant theories such as that of Becker (1983). In particular, I claimed an analogy with ultimatum games and argued that the “stronger” group that lost the battle had made what was considered an unfair proposal and was rejected by the public and ultimately by politicians.

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1 This is changing, however. For recent work in macroeconomics which incorporates fairness considerations in models see e.g. Alesina and Angeletos (2002, 2005).
2 These events are also described in a shorter form below.
In this paper I take recent theories of special interest group competition as a point of departure for modelling the interaction of such groups. In particular, I propose to adapt the framework of Yu (2005) to model competition between special interest groups involving both direct and indirect competition for political influence.

In the model the government may liberalise policy to enhance efficiency. Due to existing property rights, one group (A) will benefit disproportionately from liberalisation. Another group (B) suffers as a consequence of liberalisation. The groups can employ direct (lobbying the government) and indirect (influencing public opinion) methods to fight for political influence. If group B is more effective at convincing the public that the result of liberalisation leads to unfair gains for group A than the latter is at arguing that they deserve these gains, then the former group may slow down liberalisation, even if group A should be more successful based on traditional theories of pressure group competition.

In Section 2 I give a brief account of the episode that motivated this paper. Relevant economic theories are outlined in Section 3 and it is argued that we have to look further to explain the outcome of the case at hand. A formal framework for analysing games of this nature is presented in Section 4. Section 5 concludes.

2. The Case of the Reykjavik Savings Bank
Historically, savings banks are small financial institutions, that usually operate in a single local community and were originally created for the purpose of providing loans to individuals and small businesses in these communities. Savings banks in Iceland operate after a special chapter of the law on financial undertakings. The equity of the savings banks was initially created by so called ‘guarantee capital certificates’ (GC certificates) which are owned by ‘guarantee capital owners’ (GC owners). According to the law, ownership of guarantee capital should only give rights to a ‘normal’ return on the invested capital and does not give
the owner rights to a share in profits of the savings banks. The certificates may not be freely sold. However, the bank can buy them at its discretion at a price that corresponds to the normal return and the board of the bank will then find a new owner in some way.

The savings banks form has come under pressure in recent years. The banks have become too small relative to commercial banks to be competitive in the capital market and to adequately serve the needs of some of their larger customers. If savings banks were ordinary corporations then they would probably have been acquired by the commercial banks already. The problem is that nobody really knows who owns the savings banks. The guarantee capital certificates cannot be sold freely and the substantial amount of equity in excess of guarantee capital that e.g. the Reykjavik Savings Bank (RSB) has accumulated over its more than seventy years of operation – 93% of total equity – is effectively without an owner.

The law on savings banks was changed in 2001 such that savings banks can now be converted into corporations. This would *inter alia* allow them to raise new equity or merge with other banks. However, GC owners were not to get a share of the excess equity. Rather, the law now states that they are to get shares in the corporation in proportion to the share of guarantee capital in the assessed market value of the savings bank. The ‘equity without owner’ is to be converted into shares held by a self-governing foundation. These shares are often in majority and the foundation will therefore control the savings bank. Until February 2004, the law stated that the board of directors of the foundation was to be elected by the original capital share owners. GC owners, through their elected representatives, were therefore to be in full control of the bank after its conversion to a corporation.

After the law of 2001 was passed, pressure immediately built up to convert the RSB into a corporation and in 2002 a group of investors attempted to rally GC owners around its plan to take over the bank and sell it to a commercial bank. The board of the bank – which had already made plans of its own for conversion, which it must have wanted to have full
control over – managed to hold the fort this time. Subsequently some changes were made to
the law which were intended to strengthen takeover defences of savings banks. There was
also an easing of the rules on valuation of guarantee capital. It later became evident that the
board interpreted this as allowing a substantial increase in the share of guarantee capital in
the market value of the RSB.

Early in 2004, however, the board – now with a new member from the earlier
takeover group – solicited bids for the RSB from commercial banks. The highest bid came
from the largest bank in Iceland, KB Bank. Apparently, the majority of guarantee capital
owners supported this move. The RSB was to be converted into a corporation with the
structure outlined above. Receipts from the sale were not, however, to follow the original
7:93 division of equity. Rather, the board planned to divide 34% of the income among GC
owners and 66% were to go to the foundation. They justified this in two ways. First, prior to
corporatization, a revaluation was to be made where the guarantee capital was to be revalued
by a factor of 2.6. This brought its share up to 19%. Second, the shares of guarantee capital
owners were to be sold to KB Bank at a price of 2.13 per share while foundation shares were
to be priced at 1. In total, this maneuver led to a rate of 5.5 for each unit of nominal guarantee
capital equity and a price of 0.9 for a unit of the foundation’s equity.3

The Government of Iceland evidently did not like the deal made and responded very
swiftly. The Minister of Commerce put a bill proposing changes in the law on financial
undertakings before Parliament which made it into an act – almost unanimously – in a matter
of days. The new law states that the Minister of Commerce should appoint two board
members, the municipality where the bank is located appoints two members, and the
Association of Savings Banks one member.4 If there was a notion that savings banks were
effectively owned by the GC owners then their property was apparently more or less

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3 See the details of this story, including financial figures, in Baldursson (2004).
4 The Association of Savings Banks is controlled by CEOs of rural savings banks.
expropriated by the state by the new law. The conversion of savings banks into corporations now implies that the boards – representatives of GC owners – lose all control of the savings banks. Control then passes into the hands of a board of directors which represents the interests of everyone except the guarantee capital owners, in particular political interests related to regional policy, local political interests – which are usually concerned with protecting local jobs – and interests of smaller rural savings banks or perhaps rather the interests of their management. With the new law the government created a holdup situation where the *status quo* is clearly a more favorable position for GC owners and the present board to be in.

3. The RSB case in light of economic theory

Apart from (parliamentary) politicians, who must be defined as part of the government along with the executive branch (i.e. the Minister of Commerce) most other parties with serious stakes in the RSB case may be described as special interest groups. GC owners, the board and management would have profited enough from the takeover to make them lobby for political support or at least non-interference. All others, including the Association of Savings Banks and the employees’ union, were against the deal and had incentives to pressure politicians to stop it. With some risk of oversimplification we can therefore divide the interested parties into two main groups: those who stood to profit – the GC owners, board and management of the RSB – and those who stood to lose – basically all other interested parties.

It is therefore natural to consider the RSB case in light of the literature on competition between special interest groups. A standard reference there is Becker’s 1983 paper on competition between pressure groups. In Becker’s reduced model it is the political “influence function” of a group which determines how successful a group is in obtaining transfers at the cost of other groups. There is a cost to exerting political pressure and the efficiency of special
interest groups in doing so may vary. Becker shows that comparatively small, well connected
groups who fight for stakes that are high enough to matter for each individual are likely to be
most successful in their lobbying efforts. Becker’s model is rather unsatisfactory, however,
since it does not start from first principles and there is no explanation for what determines the
influence of pressure groups.

When the RSB case is considered it seems fairly obvious that the GC owners, led by
the board should have won the fight. This was a small, well-connected group where each
individual had a substantial amount of money at stake. The opposition was much more
diverse, less organised and each individual had less at stake.

Intuitively, some degree of self-restraint on behalf of the board due to the threat of
government intervention might have been expected in the RSB case. A conceptually similar
setting was studied by Glazer and McMillan (1992) in their study of pricing by a monopolist
firm threatened with profit regulation. In this model the probability of regulation is increasing
in the price set and once regulated, profits are fixed forever. The firm is assumed to be
rational and maximize the present value of expected profits, taking the threat of regulation
into account. The result is that the monopolist engages in a form of limit pricing to forestall
the imposition of regulation which implies lower prices than would prevail in unregulated
monopoly.

Rather than setting price in monopoly, the RSB board had to decide how high a share
they, on behalf of the guarantee capital owners, were going to take in the proportion of the
sales price of the bank that was due to the self-governing foundation. With no threat of
intervention a profit maximizing board should rationally have taken all or almost all that was
in excess of the equity of the foundation for itself. By analogy with the Glazer-McMillan
theory, threat of intervention should lower this share. With the relative share/equity prices in
the RSB case it seems unlikely that much attention was paid to a possible intervention. But
this still begs the question why the threat of intervention rises with an increased share of the GC owners.

I have not yet mentioned the model developed by Grossman and Helpman (1994) that are not as “black box” as Becker’s model and model special interest competition in a common agency framework, where politicians serve several “masters” who receive political favors in relation to direct contributions to the politicians.\(^5\) This model has proved immensely useful in modelling many policy situations and is sometimes referred to as a “workhorse” model of special interest competition. But the essence of the RSB case was not direct lobbying of politicians so this model is not directly applicable to our situation. As we shall see later in the paper, it will serve as a building block of a more realistic model and the formal approach presented in the next section builds on the common agency approach.

When the interest groups and the composition of Parliament is examined one would have expected a political conflict over the outcome of the RSB case according to the interests of constituents and how effective the various interest groups were at applying pressure to politicians. This is just politics as usual and offers no big surprises. Structurally similar issues, such as privatisation of state enterprises, which in many cases have similar consequences as the RSB deal, have, however, usually been approved without much ado by the Parliament.\(^6\) In these cases predictions of theories on special interest groups appear to be upheld since it is the groups that have most at stake (there the stakes are often huge) that win. In the RSB case this did not happen; indeed the real puzzle is why the vote in Parliament for the new law which stopped the RSB takeover was almost unanimous. Even right-wing MPs from Reykjavik – whose interests are usually aligned with the GC owners – voted for the new law. The beginning of an explanation may lie in social norms; people’s perception of what is just, equitable or fair.

\(^6\) See e.g. Boycko, Shleifer and Vishny (1996) for an economic analysis of privatisation.
Theories of justice have a bearing here. Konow (2003) surveys a large literature on normative and positive theories of justice and empirical research into what people deem fair or just behavior. On basis of the empirical evidence, Konow proposes a synthesis of several theories of justice, a multi-criterion positive justice theory where efficiency, equity and needs are “interpreted, weighted and applied in a manner that depends on the context” (Konow, 2003, p. 1235). “Equity” is here used in the sense that people receive payoffs in proportion to the inputs they control; circumstances outside of a person’s control such as birth or (brute) luck should not have a bearing on allocations, whereas effort and choices that influence the contribution of an individual should affect allocations.

By anecdotal evidence GC owners do not appear to have been needy and the proposed deal was surely efficient. The remaining key question is therefore whether the payoffs resulting from the deal were equitable: did the GC owners deserve – in the perception of the general public – to profit as much as they stood to do?

If the RSB had been an ordinary corporation and the GC owners had bought shares rather than certificates, then they would have made a calculated bet, a good, but ex ante risky, investment which yielded a handsome return. One can infer from Konow’s discussion that most people judge payoffs from such investments to be equitable. The people involved, the board of the RSB, would probably argue that this – making a calculated bet – is more or less what they did when they bought their guarantee capital certificates. However, these were not the terms of their original investment. Indeed, the law was rather clear as to the intended share of the GC owners. Yet, they managed to circumvent the law by differentiating prices by owner of shares-to-be. This well publicized fact was probably what turned the table against them.

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7 Names or characteristics of GC owners are not published officially, but apparently upper level civil servants and business men have commonly been invited to buy GC certificates. Some employees of the RSB also owned certificates.
A type of laboratory experiments that seems particularly relevant in this case is the so-called ultimatum game where a ‘proposer’ offers a division of a sum of money which the ‘responder’ can either accept or reject; rejection implies that both players receive no payment.\(^8\) By standard economic theory, where only absolute payoffs matter, the responder should accept any proposal that gives him/her a positive amount of money. However, it is a robust result in the laboratory that responders will reject low offers, but usually accept a 50% or even a slightly lower share. This seems to be almost universally expected by the proposers and the most common proposals are in fact for a 40-50% share of the responder.

The RSB case may arguably be regarded as an ultimatum game with the board as the proposer and the general public as the responder. On behalf of the guarantee capital owners, the board had access to a substantial amount of money which it could have shared with the general public through a charity. It chose to appropriate all the money for the owners. The public rejected the offer and clearly thought it inequitable and unfair.

### 4. Fairness and competition of special interest groups

As argued above it is difficult to explain the outcome of the RSB case from standard theories of special interest group competition. There are probably many other examples of cases where groups that should have won by received theory ended up as losers. A key factor in the RSB case seems to be that – rightly or wrongly – the opponents of the takeover deal succeeded in making the GC owners and board appear as a greedy, undeserving group which was trying to profit at the expense of the more deserving opposition.\(^9\) This competition for the public opinion – which appears to be very important in ultimately winning the political lobbying game – is not taken into account in the common agency model of Grossman and

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\(^8\) Güth, Schmittberger and Schwarze (1982) performed the first ultimatum game experiments. A huge literature, reviewed in Camerer (2003), has followed.

\(^9\) Zajac (1995) provides examples of how fairness issues dominate public policy debates and places such debates in a philosophical context.
Helpman (1994). However, a recent promising framework proposed for analysing this competition of special interest groups – taking both public opinion and lobbying into account – is that of Yu (2005).

Yu’s framework builds on the work of Grossman and Helpman, but adds an important new element to their model: that of indirect competition to influence public opinion. Yu points out that special interest groups are often successful in promoting their interests without much direct political lobbying or contributions. In particular, some environmental groups have been successful in their fight against polluting industries without high direct political contributions. Similarly to the case discussed above, the industries would be expected to have the upper hand if economic stake and efficiency of organisation is taken as an indicator of likely success, in accordance with predictions of previous models.

Yu formulates his model in terms of the competition between industrialists and environmentalists to influence environmental policy; fairness does not enter into the discussion. These two groups compete directly and indirectly for political influence in a three stage game. In the first stage – that of indirect competition - each group tries to sway public opinion on pollution towards its own cause. In the second stage – that of direct competition – there is direct lobbying, modelled by political contributions, of the incumbent government. Finally, in the third stage the government decides on environmental policy, taking both political contributions and public opinion into account. In essence, the model is therefore an elaboration of previous common agency models, with the addition of the first stage of competition for favorable public opinion. An important difference from the common agency model of Grossman and Helpman, however, is that the government takes the position of the median voter into account rather than social (or group) welfare. This is the reason why the special interest groups try to influence the median voter.
I have argued that influencing the perception of the public of what is fair is a key to understanding the outcome of a case such as the RSB case, where the “strong” group lost. It therefore seems natural to take Yu’s model as a starting point in analysing competition between special interest groups where fairness is taken into consideration. Hence, we adapt this model for our purposes and consider a situation where the government has to decide to what degree it pursues liberalisation – e.g. privatisation or an easing of regulation – of a particular industry.\textsuperscript{10} Liberalisation increases the efficiency in production of industry output. There are two groups in society to whom it matters considerably what policy is chosen and are therefore organised around their special interests; we label these groups A and B. Group A – supporters of liberalisation – is comparatively small, but each member of the group stands to benefit substantially from liberalisation. Group B – opponents of liberalisation – have a strong disutility of liberalisation; for example due to potential loss of jobs or for ideological reasons.\textsuperscript{11} All individuals in society are affected positively by liberalisation through increased consumer surplus. Members of the general public in general do not have \textit{a priori} strong preferences towards the distributional consequences of liberalisation. However, if they can be persuaded that those that benefit do so unfairly – without having deserved these benefits – liberalisation will affect the utility of the median voter negatively and his preferred degree of liberalisation is therefore lowered.

In the first stage of the game groups A and B therefore invest in sending “messages” to the public at a given cost per message.\textsuperscript{12} Group A tries to convince the median voter that they deserve the benefits of liberalisation, while group B tries to do the opposite. Their efficiency in affecting public opinion may be different for various reasons. For example, the

\textsuperscript{10} An outline of the mathematical model described verbally in this section is given in an appendix to the paper. \\
\textsuperscript{11} We may also think of group B as losing financially from liberalisation just as group A benefits from it. \\
\textsuperscript{12} Technically, this is modelled by Bayesian updating of an initial public opinion.
public may be less inclined to believe messages from the business sector than employees.\textsuperscript{13} After this stage the attitudes of the median voter as regards the desert of group A are determined and known.

In the second stage of the game the two groups lobby the government directly by direct political contributions.\textsuperscript{14} In the third and final stage, the government wants to set policy as close as possible to the preferred policy of the median voter – which has been influenced by advertisements from pressure groups – in order to increase its chances of reelection. However, it also takes contributions of special interest groups into account. Conversely, the groups balance their spending on public persuasion and direct political contributions against increased utility when making their decisions on how much to undertake of each activity.

There are some interesting results that come out of this model. First, if the groups are equally efficient in public persuasion, the marginal benefit of indirect effort is higher for the group which has more direct political influence. Therefore, there is complementarity between direct and indirect competition and a group which spends more funds on direct lobbying will also invest more in public persuasion.

The second main result is that if group B, say, becomes more effective in swaying public opinion than group A, then a substitution into indirect competition is induced. Therefore group B will be more aggressive in indirect competition, i.e. invest more in trying to convince the public of the righteousness of its own cause. The converse holds for group A, which will now invest more in direct lobbying and reduce their public relations spending. In equilibrium the median voter wants less liberalisation than before when effectiveness at indirect competition was equal. The government will, however, get more direct contributions from group A to move the final policy away from the preferred policy of the median voter.

\textsuperscript{13} In the RSB case the public relations fight took place mostly by public debate – contributed newspaper articles etc. The costs of sending “messages” were therefore mostly time costs of those that wrote the articles. These costs were probably similar for most persons involved. It was therefore crucial who was more “believable”.

\textsuperscript{14} Clearly, we could also introduce different efficiency of the groups at this stage just like at the first stage.
Finally, it is of interest to consider the effect of a change in the initial stance of the public towards the consequences of liberalisation. If liberalisation is increasingly seen as leading to unfair gains for a narrow special interest group then, similarly to the result of increased efficiency in public relations activities, there is substitution from the opponents of liberalisation from direct lobbying to public persuasion. Conversely, the benefactors of liberalisation will rely more on direct political contributions.

5. Discussion and conclusion

This paper has presented an example of a case where it appears that conventional theories of special interest group competition fail. This is in the sense that a small, well-connected group where each member had much at stake lost in a policy game against a larger and more diverse group where each member had less at stake. I’ve argued that convincing the public that one’s cause is fair is a key to understanding the outcome. A formal model, building on the common agency framework of Grossman and Helpman and others, but incorporating an initial stage where each group tries to convince the public of its desert was presented. A key feature of the model is that if one group – e.g. the “underdog” – is more efficient at presenting its case to the public than the other then it may move the views of the median voter in its own direction and ultimately win the battle. This group may spend little or nothing on direct lobbying of incumbent politicians who have little choice but to follow along with the median voter if they want to stay in power. The paper therefore provides a first step in a better understanding of “fairness games”, to borrow a phrase of Zajac (1995).
Appendix: A model for interest group competition

We assume there are two perfectly competitive industries in our economy. One industry produces a numeraire good and the other produces good $x$ – banking services in our specific setting. Labour is the only factor of production for the numeraire good whereas production of $x$ requires labour and capital. The degree of liberalisation affects productivity in the production of good $x$ positively:

$$X = \left[1 + E(\lambda)\right]F(L, K), \quad E(\lambda) \geq 0, \quad E' > 0, \quad E'' < 0$$

where $X$ is the output of good $x$, $F$ is a CRS production function and $E(\lambda)$ is the gain in productivity from liberalisation $\lambda$. There are two special interest groups, A and B. Due to existing property rights group A receives a windfall gain from liberalisation. Group B does not receive such gains from liberalisation.

Following Yu (2005), we assume utility of consumption of the two private goods to be quasi-linear and given by

$$U_i(X_0, X, \lambda) = u(X) + X_0 - D_i(\lambda)$$

for an individual of type $i$. Here $u$ is the utility of consuming good $X$ ($u' > 0$, $u'' < 0$) and $D_i(\lambda)$ is the disutility of realised gains from liberalisation due to perceived unfairness of unequal distribution. We assume $D_i(\lambda) = \mu_i d(\lambda)$ ($d' > 0$, $d'' > 0$) where $\mu_i$ parameterises individual $i$’s perceived injustice of the benefits to group A of liberalisation. Group A has a low value of $\mu_A$ (perhaps negative) whereas Group B has a high value. Both these groups are a small fraction of the population as a whole and have enough at stake to be organised. The general population does not have much at stake and is therefore not organised due to free rider problems.

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15 The model of this appendix is an adaptation of Yu’s (2005) model of competition for political influence in environmental policy.
Choosing labour and capital in the production of $x$ so as to maximise profits we get the return to $K$, $\pi(p, \lambda)$ where $p$ is the price of $x$. The degree of liberalisation preferred by each group is obtained by maximising the indirect utility of each group – the general population, Group A and Group B – over $\lambda$:

$$\lambda_i = \arg \max \lambda \ V_i, \quad i = p, A, B,$$

where

$$V_p = s(\lambda) + w - \mu_p d(\lambda),$$

$$V_B = s(\lambda) + w - \mu_B d(\lambda),$$

$$V_A = s(\lambda) + w + \pi(p(\lambda), \lambda)/N_A - \mu_p d(\lambda).$$

Here $s$ is the consumer surplus of consuming a level of $x$ corresponding to $\lambda$; $w$ are wages, hereafter normalised to 1; and $N_A$ is the number of individuals in Group A.

Since A and B are small groups compared to the population as a whole, the median voter’s preferred degree of liberalisation is given by $\lambda_p$.

The incumbent government has the objective function

$$G = C_A + C_B - a[\lambda - \lambda_p]^2, \quad a > 0$$

where $C_A$ and $C_B$ are the political contributions from Groups A and B, respectively, and $a$ parameterises the weight attached to political cost.

The government must clearly have an idea about $\lambda_p$ before it sets its policy. Events therefore unfold in a three-stage game with the following stages:

1. The pressure groups compete indirectly by investing in influencing the views of the general public towards liberalisation. After this stage $\lambda_p$ is determined and known.
2. The groups compete *directly* by simultaneously offering political contributions, \( C_A \) and \( C_B \), to the incumbent government. Here, Groups A and B maximise their net utility, given by \( N_A V_A - C_A \) and \( N_B V_B - C_B \), respectively.

3. The government chooses the realised degree of liberalisation \( \lambda \) so as to maximise its objective function \( G \).

The model we have outlined above is of exactly the same structure as that of Yu (2005) and the last two stages are of the same structure as those in the common-agency models of Bernheim and Whinston (1986) and Grossman and Helpman (1994).\(^{16}\) Here, we therefore only present the bare bones of the model and refer to Yu (2005) for the formal analysis that underlies the results stated in Section 4.

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\(^{16}\) See also the exposition in Grossman and Helpman (2001).


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W03:01 Eirik S. Amundsen, Fridrik M. Baldursson and Jørgen Birk Mortensen: Price Volatility and Banking in Green Certificate Markets

W02:10 Tryggvi Thor Herbertsson and Gylfi Zoega: A Microstate with Scale Economies: The Case of Iceland

W02:09 Alison, L. Booth and Gylfi Zoega: Is Wage Compression a Necessary Condition for Firm-Financed General Training

W02:08 Asgeir Jonsson: Exchange rate interventions in centralized labor markets

W02:07 Alison, L. Booth, Marco Francesconi and Gylfi Zoega: Oligopsony, Institutions and the Efficiency of General Training

W02:06 Alison L. Booth and Gylfi Zoega: If you’re so smart, why aren’t you rich? Wage inequality with heterogeneous workers

W02:05 Gudmundur Magnusson and Saso Andonov: Basel Capital Adequacy Ratio and the Icelandic Banking Sector: Quantitative Impact, Structural Changes and Optimality Considerations

W02:04 Tor Einarsson: Small Open Economy Model with Domestic Resource Shocks: Monetary Union vs. Floating Exchange Rate

W02:03 Thorvaldur Gylfason: The Real Exchange Rate Always Floats

W02:02 Fridrik M. Baldursson and Nils-Henrik M von der Fehr: Prices vs. Quantities: The Case of Risk Averse Agents

W02:01 Tor Einarsson and Milton H. Marquis: Banks, Bonds, and the Liquidity Effect

W01:11 Tor Einarsson: Small Open Economy Model with Domestic Resource Shocks: Monetary Union vs. Floating Exchange Rate