DEPARTMENT OF ECONOMICS

Working Paper

A SMALL COUNTRY IN
EUROPE'S INTEGRATION.
GENERALIZING THE POLITICAL
ECONOMY OF THE DANISH CASE

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UNIVERSITY OF AARHUS • DENMARK

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A small country in Europe's integration

Generalizing the political economy of the Danish case

By Martin Paldam, Department of Economics, University of Aarhus.[1]

Abstract: A contract between a small country and a large organization is analyzed using an Edgeworth-Box model. The population of the country is divided into two groups: people and elite. The contract has two explicit parameters: an exchange of sovereignty and a net transfer. A small country is defined as one where people consider the power they gain in the organization to be infinitesimal. The elite recognize that they get a net power gain. Further, there are two implicit parameters, the big-country advantage and some rents. It is shown that the lens for the elite is much larger than the lens for the population. In a dynamic integration process the contract will inevitably leave the lens. It is finally discussed if it is likely that the resistance of people will erode over time.

I. Introduction

Even without creative bookkeeping, Denmark fulfills the Maastricht conditions for the next stage of the EMU. Most decision makers and experts want to go ahead. However, there is one problem: people have to accept. All evidence suggests that a decision to proceed would fall at a referendum.[2] The fifth referendum on an EU-subject in Denmark will take place in May 1998 on the Amsterdam Treaty. The treaty is soft - even limp - but the result is by no means certain. The Danish political elite worries, and political tacticians of all stripes are busy planning how to handle this delicate matter, so that the reluctant Danes can be cajoled into accepting the EURO later on.

The present article attempts to make a political-economy model, to explain the limited *popularity* of the EU in a small member country using Denmark (who joined 25 years ago) as the main example. The model can be amended to cover a big country as well, but this will only be briefly sketched in Section III.5. Even if a large discussion of these matters have ranged in the media, it seems that few efforts have been spent trying to make a consistent theory (see however Vaubel, 1994). My pioneering efforts suffers from the problems of such efforts, but hopefully the reader will forgive a few loose ends and the fact that I mostly manage to formalize and join up well known insights.[3]

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1. A version in Danish was presented at the EMU-conference in Oslo, 31/10-1997, see Paldam (1998). I am grateful to my discussant Jens Thomsen, to Louise Andersen, Niels Thygesen and others at the conference. The paper has also benefited from comments from my students, Gunnar Thorlund Jepsen and Jan Rose Sørensen. However, the basic model was first presented in Paldam (1996) analyzing the Union between Denmark, the Faroes and Greenland. The address of the author is: MP/Depatment of Economics/Aarhus university/8000 Aarhus C/Denmark. Phone +89-42-1607 or 08), fax 86-13 63 34. E-mail <mpaldam@eco.aau.dk>
2. Legal scholars might discuss if it is really demanded by the constitution. But as things have developed, all political parties have "promised" people that major steps in the integration process will be subject to a referendum.
3. The formalization is mainly graphical. I deal with large issues and make several heroic guesses giving orders of magnitudes where serious estimates do not exist. Such guesses are illustrations presented with no references.

Figure 1. EEC/EUs popularity in Denmark (series from Gallup)
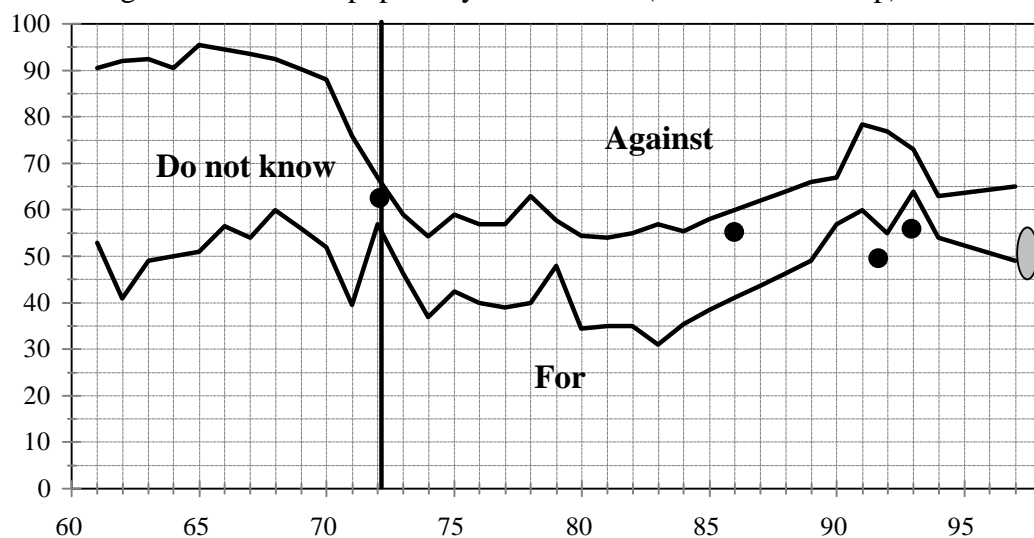
Note: The question is: »What would you vote today, if you should decide about membership in the EU?«. The »*For*«-percen-
        tage goes from 0% up to the lower of the two bold lines. The »*Against*«-percentage goes from the upper of the two
        bold lines up to 100%. Consequently the »*Do not know*«-percentage lies between the two lines. The four referenda
        on EU-themes are shown as black dots: The most important was the one in 1972 about joining. The 1986 referenda
        had a somewhat woolly theme, while the Maastricht treaty gave two referenda 1992/93. First the treaty was rejected,
        and then people accepted the treaty after a set of special objections added to the Danish version of the treaty. The
        clauses were presented to people as improvements. The big grey dot is a soft prediction as of the next referenda.

Figure 1 shows the popularity of EU during the last 37 years, including the 25 years where Denmark was a member. As a rule of thumb barely 50% of the Danes like the EU, while almost 40% are against. The series illuminates several popular conceptions and hypotheses. Two points are worth noting:

1.   The referenda do not deviate much from the curves, but the theme, the political situation and the propaganda/information during the campaign does play a role.[4]

2.   Many used to believe in an *erosion-hypothesis*, where the resistance would erode as people got accustomed to being member.[5] Data does not support this notion - as will be discussed.[6]

When the popularity is disaggregated, a pattern appears. It looks remarkably as predicted by economic theory. The pattern of popularity across groups and nations illustrates that human behavior goes by the book - that is the pocketbook. Groups for whom EU has favorable arrangements like the organization. That, eg, applies to Danish farmers. Groups having an especially favorable national arrangement - threatened by the joint policies - dislike EU. That, eg, applies to Norwegian farmers.

4.   The vote hence mostly reflects the general popularity of the EU as such. The referanda themes are complex, dealing
        with decisions reached by compromises, and codified in a impenetrable bureaucratic language. The effects of each
        decision being small and long-run - the cumulative effects gradually becomes important.
5.   The alternative - but much shorter - series from Eurobarometer shows a very similar pattern. The EU-membership
        is e very salient issue for most Danes.
6.   The erosion hypothesis was as widespread among proponents and opponents all the way back to 1972. The
        proponents assured the voters that EU was basically a question of getting more money for the agricultural exports,
        and that all these promises in the treaty about future integration was typical »Latin« hype - »big words« they did not
        need to worry about. In particular all these ideas - whatever they meant - about forming a »union« was baloney.

We shall also discuss an additional fact (not included on the graph). While only 50% of the Danes like the EU, a much higher fraction of the Danish elite likes the organization - eg, in the Parliament almost 90% are for. There is a large *gulf between people and elite* in this matter.[7] The difference has lasted throughout the period, and it appears to apply in all other EU-countries and also in the potential applicant countries. I know of no other field with a similarly large and permanent gulf between people and elite. The gulf is one of the stylized facts a good theory has to be able to explain - see Section II.6.

The analysis proceeds as follows. Section II presents ideas and stylized facts to be modeled in Section III. It covers a small country, *Sland*, that has a *contract*, characterized by a set of explicit and implicit variables, with an organization, *Org*. It considers Sland aggregated and disaggregated to two groups: *people* and *elite*.[8] Section IV takes a look at EUs popularity function - the purpose here is to discuss if the EU-resistance will erode in the future.

II   Some observations and ideas

The six parts of this section contains stylized facts, hypotheses and ideas: (1) gives some historical observations. (2) and (3) present the variables to be discussed. (4) looks at relevant aspects of the 1/N-problem, ie, that we consider a small country in a big organization. (5) interprets the rent found in all international organizations. Finally, (6) considers two explainations of the gulf between people and elite.

II.1   *The small big-country advantage, F*

The latest 50 years have seen two reverse trends.

Trend 1: The big empires have dissolved - mostly voluntarily. Most colonies have simply been set free. Section III.5 suggests an interpretation using our model.

Trend 2: Increasingly countries join *voluntary unions and international organizations*. The number of such organizations is steadily growing by about 2% per year (see Frey, 1997). Denmark is pt a member of several hundred organizations. We shall consider several explanations for this proliferation as we proceed.

The most straightforward explanation is that it is an economic advantage to everybody. Many statistical studies have tried to explain the wealth and growth of countries. Here the *size* of the country, S(land), normally contributes positively.[9] Crudely, a variable for LogS, gives a coefficient of 1%. A country of 50 mill inh tends to grow 1% faster than a country of 5 mill. A country of 500 mill may even grow 2% faster. This small-country disadvantage is mainly due to LDCs that have followed inward looking autarchic development strategies. Such strategies may work for large countries, but they fail - often spectacularly - in small countries (such as Albania of the old).

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7.   The difference is often dramatic - especially at the left: It seems that about 90% of the voters of the Socialist People'sParty are against the EU, but a majority of the MPs of the party are for. When a new MP is elected for the party he or she always starts as a staunch opponent, but then after some years opinions change.

8.   The word »elite« covers the most powerful 0.1 per cent of the population. I imagine that $\frac{1}{5}$ of the group are politicians and perhaps twice as many civil servants, while the rest work in organizations, business and the media.

9.   It is assumed that S is measured in mill inhabitants or another reasonable measure. The effect of S(land) was already found in »the pattern of growth« literature see eg Syrquin (1988).

There thus is a strong reason why small countries join international organizations. Small rich countries are typically keen members of many international organizations, to counteract the small-country disadvantage. However, there is the problem of *sovereignty*.

A country joins Org(i), as it pays to coordinate a group of decisions. These decisions constitute a fraction $\beta_i \in [0,1]$ of all decisions made by the country. All members thus give up the sovereignty β_i to Org(i), but gain an influence over the joint decisions, β_{Org}, made by Org. The members of Org typically give up the same β to a given Org, ie, $\beta_i = \beta_{Org}$ for all i. Most Org's have small, stable and well defined β's. Is a country a member of N organizations, it has given up the sovereignty:

$$\beta_{\Sigma} = \Sigma_N \beta_i \tag{1}$$

EU is an organization with a fairly large β. Furthermore, β is scheduled to grow as will be discussed. In addition, it appears that different member states have quite different β's in EU.

A country thus obtains an advantage, F_i, from joining Org(i). If all possible organizations existed, and the country consistently optimized F, an F-curve, $F = F(\beta)$, as depicted on Figure 2 would appear. For the optimal »portfolio of organizations« β^* the country obtains the maximum F^*. For a small country F^* may be as large as 10 or even 20% of GDP. In the long run it accumulates to more - if the alternative is to be *fully* independent.

Figure 2. The advantage F as a function of the degree of integration β
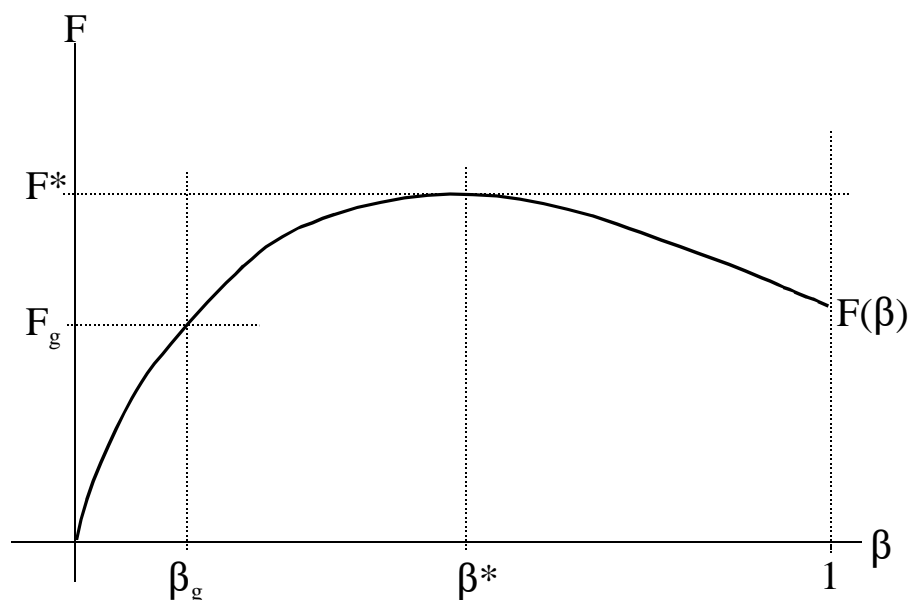
On the figure β^* is placed nicely in the middle of the interval [0, 1]. For a small country it is perhaps optimal to be half-independent. For a big country β^* will be (much) smaller. It is likely that some of the organizations in an optimal portfolio have many members while others are small (see Frey, 1998). In practice there is a limited choice of organizations; but our small country has surely joined many »soft« organizations (with low β's), as GATT/WTO, OECD, the UN-system, BIS, The International Postal Union, etc. Sland is thus

in point $g = (\beta_g, F_g)$, where it has already harvested $F_g < F*$.[10]

We now consider an additional organization - EU - with a high β. The additional F to be gained is perhaps 3- 4% only, but there is a cumulative aspect. If the 3-4% are within a decade, it might be several times more in the long run. There is the further aspect regarding EU that the contract is dynamic so that β is scheduled to grow. Hereby F also grows, even if there is likely to be a falling marginal productivity in the production of $F = F(\beta)$. After F* the marginal productivity even turns negative.

In F we also include the political advantage. EU is often characterized as a peace-maker, as the organization has tied the old enemies Germany, France and England together with many subtle strings. This political advantage is very little affected by the inclusion of Sland. The small country obtains most of the political advantage when the big countries cooperate, and this also applies to the economic advantage, as long as Sland is close to the *big-country block* and has a set of agreements (in the many other organizations). So for Sland most of F appears as a positive externality. A nicely roasted duck that lands right on the plate, as a free meal.[11]

II.2   Country size and the two power variables: γ, β

From now we simplify by considering one organization only. That is, we start the analysis with $g = (\beta_g, F_g)$ as (0, 0). Also all other members of Org are aggregated as one unit. Org makes the *joint decisions,* β. Sland thus gives up sovereignty β_{Sland}. To distinguish as clearly as possible, we term $\beta_{Sland} = \gamma$.

γ is thus the decisions Org makes in Sland, or the power of Org in Sland. That is, γ is approximately - but not necessarily - exactly the same as β. The reader may see γ and β as multi-dimensional vectors. In our illustrations we assume that the two variables are one-dimensional, $\gamma, \beta \in [0,1]$. If they are 0, the country is fully independent. If they are 1, it is fully integrated. A member-state in a federation (as the USA or Germany) have large β's (and γ's), but they are well below 1. It appears that all federations now fights between those who want to increase β, and those who want to decrease γ.

When Sland joins Org, it loses sovereignty, γ, and gains a share, α, of the power over the joint decisions, β. Normally α is *fairly proportional* to the size of the country.

$$\alpha \approx \pi = S(Land)/S(Org) \tag{2}$$

If strict proportionality applies, Sland gets exactly as much power in Org as it loses in Sland itself:

Strict proportionality:	$\alpha = \pi \iff \alpha\beta = \gamma \iff S(Org)\gamma = S(Sland)\beta$	(3a)
Power gain:	$\alpha > \pi \iff \alpha\beta > \gamma \iff S(Org)\gamma < S(Sland)\beta$	(3b)

We assume that Sland is a small country, where $S(Sland) << S(Org)$. We use the term small country in the following precise sense:

Sland is a *small country* if its people considers $\alpha = 0$, so that $\alpha\beta = 0$ (4)

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10.   Switzerland - in principle - stays out of all international organisations involving a loss of sovereignty. Nevertheless it is - de facto or de jure - member of many organisations.

11.   Small NW-European countries are keen members of UN, where they fight for world peace. However, regarding peace in NW-Europe, EU is surely the key organization.

A small country is thus a country where people feel that they give up sovereignty without getting a corresponding power in Org in exchange.[12] A »big« country is thus a country where people feel that they get power αβ in Org in exchange for the power, γ, it gives up - see here Section III.5

A careful review of the data will normally show that small countries get a »power gain«, as defined in (3b). The reason is that Sland tends to become over-represented in all committees and boards. If Sland has to be represented and such bodies have to have a manageable size, Sland must become over-represented. This means, that the elite of Sland has to provide relatively large numbers of representatives to committees and boards. Sland's representatives will surely end up the decisive vote in great many cases.

To summarize: Sland does get a power gain by joining an Org (as EU). This is well understood by the elite, but has no reality for people in Sland.

II.3   The remaining three parameters: T, F and R

We also need to know the net transfer, T, from Org to Sland. T is a sum that appears in the two budgets. Apart from administrative costs, T is a zero-sum game within Org.

In addition, there is the *advantage*, F, Sland obtains due to the reduction of the small-country disadvantage. F is hard to calculate, as it is the cumulative and dynamic effect of many small effects. All members - especially the small ones - obtain a positive Fs. Cooperation is a positive sum for Org, but parts of F is a positive externality Sland may get from the existence of Org, whether or not it is a member.

The last variable is R - the rents produced by Org. The decision process in all international organizations is separated by one step from the normal democratic controls. The potential recipients of all payments tend to have a relatively large influence upon their sizes. International organizations give the elites of the member-countries a most appreciated opportunity for rent-seeking. In addition to the necessary administrative costs a rent, R, appears in every international organization. Sland's share of the rent accrues to the elite. Two points are here pertinent:

a.   The rent is likely to grow with the number of organizations, so we here have our second explanation for the proliferation of international organizations.[13]

b.   As in all theories of rent seeking we have a measurement problem for R. It is conceptually difficult, and those participating in the feast do not try to make measurement easy.

The contract, Sland makes with Org, has three *explicit* parameters: (γ, β, T). Sland »sells« some γ »to get« some β and T. In addition, Sland hopes to obtain a large positive F, and finally there is R. Both F and R are *hard-to-calculate side-effects*, which are the *implicit* parts of the contract.

EU is an organization with a parliament, but power-wise it is a strangely free floating parliament. Basically, the EU bureaucracy is as much removed from the normal democratic process as other internatio-

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12.   Our definition of a small country is a limiting case. What we need to carry through our analysis is only that people consider αβ < γ.

13.   Imagine that the same aggregate β is produced by 10 small or one large organization. The aggregate R is likely to be less controllable - and hence larger - in the first case. This is an *illusion* result like the *complexity of tax structure* result in the fiscal illusion literature, see Holsey & Borcherding (1997)

nal bureaucracies. However, two important points applies:

A. EU is an Org, where the parameters of the contract (γ_t, β_t, T_t) are dynamic. They are small at the beginning, but are scheduled to grow by the treaty. This has happened as discussed in Section III.4.
B. In the case of EU we know a little about R.

Here the central budget is 1.27% of the GNP of the members. It contains less than half the rent generated.[14] A small fraction of the budget goes to wages. Here we know that some rent is included. Let us assume that (1) the EU wage level is 20% too high,[15] and (2) that this is typical for the R-margin in the Org, and (3) we multiply by 2, as the budgets only cover half the R-generating activities we get a first guess of R ≈ ½% of the GDP of the member countries. This is a wild guess, but the true number is hardly twice as big?

The elite surely knows F and R better than people do; but the question is if there can be a systematic difference in the assessment of the two parts. We shall term the hypothesis that peoples' assessment of F and R is an unbiased estimate of one of the elite as our *RE-hypothesis*.

Till now we have thus reached the four »laws« of Table 1. The logic of law 2 and 4 both enters the well known 1/N-complex, worth a few words.

Table 1. Summarizing four laws/stylized facts

Law 1	In practice small countries get a net »power gain« as members of an Org: $\alpha > \pi$.
Law 2	People in the small country feel that $\alpha\beta$ is zero, so that the gain is of no consequence.
Law 3	In addition to the big-country advantage, F, the Org produces a »rent« R. It is due to the relatively large wages and fringe benefits in Org
Law 4	All of β and most of R *accrues* to the elite of Sland.

II.4 A note on the 1/N-complex

Several of the most persistent anomalies in economics occur for decisions where the *expected utility* should be multiplied with a small probability. One family of 1/N-problems involves the frequency of a rare type of accidents. The reader may here think of a cigarette smoker who is against nuclear power. Another 1/N-problem *is the paradox of voting*: the utility, obtained from voting - is the product of (1) the advantage obtained from getting the election outcome desired and (2) the probability that she is decisive for that outcome (that is something like 1/N). This utility can hardly be larger than the cost of voting. Nevertheless

14. EU produces lots of regulations generating rent. However, in many (most?) cases this rent is less than the rent produced by the regulations the individual countries would have had in the absence of EU. This is illustrated when looking at the biggest rent creator in the EU: the agricultural regulations. They are modest when compared to the ones of Iceland, Norway and Switzerland. One of the ways EU generates a F is precisely by blocking rent seeking in the countries, and by making the common rent generating process very cumbersome. However, Brussels is full of lobbyists busy working to produce rents to their clients.
15. Those, who have tried making the concrete choice (I have worked for UN and IBRD, but not EU), know how complex the calculations are. The advantage is not as large as it seems at first. Much depends upon the job possibilities of the spouse, the choice of car, house etc. However, regarding the EU there is a clear advantage.

most people vote.[16] However, the 1/N-problem is important for the effort people make to be well informed about the subject they vote about. When the 1/N-complex enters *ignorance becomes rational*.

The 1/N-complex is relevant for our analysis in two ways: (i) when we consider peoples' level of information regarding EU. It would be irrational for them to study the issues much before voting. (ii) When assessing the weight (α) people assume Sland has in Org. We have argued that people assume $\alpha = 0$ and thus $\alpha\beta \approx 0$. One sign that this is the case is that while about 80% vote at national elections, much fewer participate in the EU elections.

It makes sense that people care little about the power their elite has in EU. Here the elite has the interest as they are the ones executing the power. They also know much more about F and R, but strictly speaking F accrues to everybody. As regards R it is a very newsworthy variable. Many stories circulate and via the media and among people regarding the great salaries and wining and dining in Bruxelles. Also, the mountains of grain and butter and the lakes of wine appeal to the public imagination and wit. People understand and greatly disapprove of R.

II.5   *The hypothesis that the »rent« R, is a »cost« in the production of F*

R can be understood as a cost in the production of F. To produce F a bureaucracy is necessary, and it takes a rent. This bureaucracy is by necessity removed by one step from the normal decision process and the normal control of people. This generates a rent, R. We can define the profit, Π, that Org gives people in Sland as the surplus in excess of R:

$$\text{Org's profit:} \quad \Pi = F + T - R \approx F - R \tag{5}$$

Thus formulated R becomes a cost to be minimized. The problem is that those, who have to minimize R, are the same as the ones consuming R. However, an even more important problem is the risk that the competition to obtain the rent ends up expending all of F. That is, the »competitive forces« on the rent-market may compete the profit, Π, down to zero.[17]

EU, aspiring to a large F, hence easily gets a large R as well. In the longer run F no doubt becomes at least 5% af BNP. In addition is the political advantage. Imagine that the risk of war in Central Europe is reduced by 0.1% per decade (it goes down from say 0.2 to 0.1) - this would surely increase F several times. Sland thus obtains a very handsome profit if R is ½% or even 1% of GDP. That is, EU does have a large R, but it is a cheap price to pay for a much bigger F.

There are other Org's - such as a number of the member organizations in the UN family - where it appears that Π has been competed down to zero. Going back to the argument in II.1 we now see that there is a problem for Sland in putting together the optimal portfolio of many soft Org's. With many Org's the control-problem becomes impossible - the result is likely to be a much bigger aggregate R.

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16.   Several explanations have been found, see Aldrich (1997). However, none is really well verified empirically and »acceptable« according to the usual rules of economics (Though they might be true). It does not help to ask people as they answer that they take voting to be and important democratic duty.

17.   The models of rent-seeking competitions often converge to the zero-profit result - see the surveys by Nitzan (1994) and Tollison (1997). If so happens, the elite has managed to consume all of F while people get nothing. However, one may argue that it is the elite that produces F, and that people only loses if R becomes larger than F.

II.6   The gulf between elite and people - two models

There are two models explaining the big gulf between people and elite. Model A is favorable to the elite while model B is favorable to people. However, model A builds upon a big irrationality, so it does not fulfill the conditions for being sound economics. We shall therefore disregard it, even when it contains more than a grain of truth. Fortunately model B fulfill the conditions for being impeccable economics:

A: The »mob-model« sees people as an ignorant chauvinistic crowd, who just does not understand. However, the elite understands. This model is supported by polls of peoples' knowledge about the EU. They do not know much. The low level of understanding makes it »unreasonable« that they vote about details in agreements they do not understand. On the other hand, people do have strong opinions, which they vent in their crude way. There is no end to the low motives the elite ascribes to the stupid and primitive mob. And, in fact, when one listens to the kind of statements people regularly voice at anti-EU rallies one has to pinch oneself to determine if it is not a nightmare[18] Fortunately, the wise and tolerant elite has undertaken to lead the prejudiced and ignorant mob, so that things do not fall apart.

B: The »rational« model looks upon the matter in the perspective of the laws of Table 1, the gulf is due to the interests of the groups. Sland's people do not care if their elite gets in Org - $\alpha\beta$ is thus of no interest to them. Also, R gives people a negative utility. The elite gets positive utility from both R and $\alpha\beta$ - the elite might believe that they help people by making the decisions $\alpha\beta$, but it happens in such an indirect way that they do not really notice.[19] The story as regards F is more complex. However, the gain people get as citizens of a member state in Org does come in all kinds of unrecognizable ways - it is taken for granted almost as electricity. Something people do not give a single thought as long as it works.[20] We shall return to this point, when discussing *myopia* and the *grievance asymmetry* in Section IV.3.

III.   A model of a voluntary union between a large organization and a small country

Formally we consider an agreement $\mathbf{A} = (\gamma,\beta,T)$ between Org and Sland. To be ratified, it must be better than no agreement $\mathbf{0} = (0,0,0)$. A *lens* must hence exist with points giving more utility to both parts than $\mathbf{0}$, and, in addition, $\mathbf{A}$ must be within this lens. This situation lend itself to an Edgeworth-box presentation. In the illustrations a non-empty lens, K, must exists between Org and Sland, in the case where the two parts look like EU and Denmark. The lens must be empty in the very similar case, where the two parts look like Norway and the EU. Once the lens is modeled, one may get some insights into its movements when the parameters of the contract (γ,β,T) change.

III.1   The bound for Sland's indifference curves as regards A

Consider first how Sland's people consider the contract $A = (\gamma,\beta,T)$. They get utility from T, disregard β, and get disutillity from γ. Their indifference curves hence look like drawn on Figure 3. People want a low

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18.   The combination of the EU membership and the in-migration of 4-5% immigrants into the hitherto very libral and
         tolerant NW-European countries has revealed ugly parts of the »souls« of our peoples.
19.   It is a net power gain for the elite $\alpha\beta > \gamma$; but the crucial asymmetry is that $\alpha\beta$ counts for the elite and not for people.
20.   When the power station in Sisimiut (the second town of Greenland) broke down in September 1997, the closest thing
         to a riot which has ever occurred in Greenland took place.

value of γ and a high value of T.[21)] The arrows show the direction for increasing utility. The curves bend upward for the following reason. People in all small countries know that international cooperation is necessary, so that there is an F. To give up a bit of sovereignty to get T and F is thus acceptable, but if γ becomes significant, people react.

Figur 3. Llands' indifferenskurver
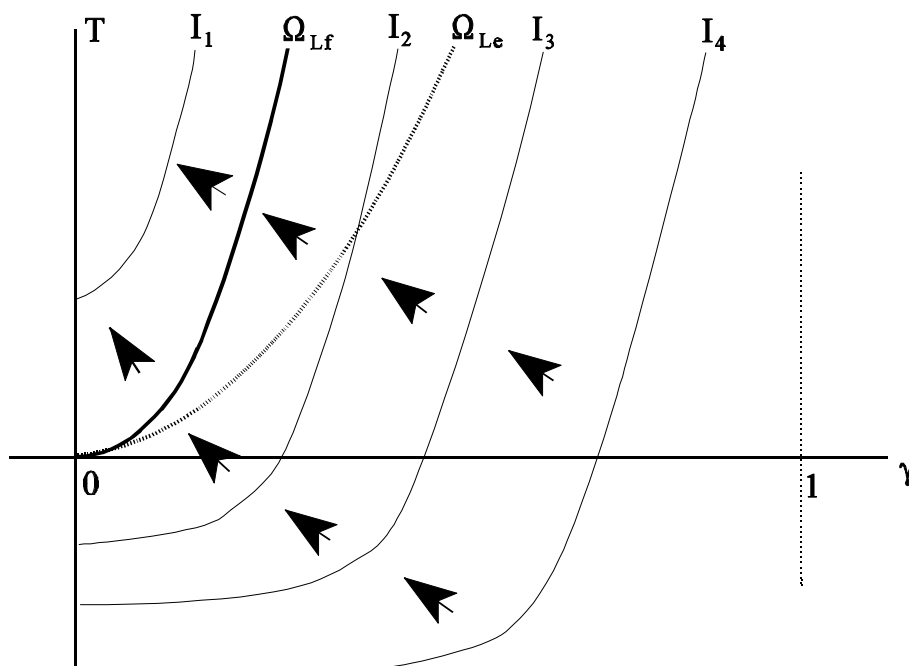
We next consider how the implicit variables F and R affect peoples' indifference curves. We have argued (as per our RE-hypothesis) that people come to know both variables, but also that they do not follow these variables closely (there is a great deal of rational ignorance). So in the short run they are predetermined: $F, R = \underline{F}, \underline{R}$. If F grows, the curves moves upward, and becomes steeper - the larger F is the more people like EU. The situation is the reverse for R. If R grows, the curves move down and become flatter. We conclude that $I_{Lf}(F,R,\beta,\gamma,T) \approx I_{Lf}(\underline{F},\underline{R},\gamma,T)$, as drawn.

The indifference curve, Ω_{Lf}, going through (0,0) is depicted in bold, as it is a special one. It gives the outer bound for any lens possible. That is, it divides the plane into two parts: To the left of the bold Ω_{Lf}-line people in Sland will voluntarily accept contacts, while they will not to the right of the curve. In other words, if the contract A is a dynamic one, and it gradually moves to get to the right of the Ω_{Lf}-line - people will want to get out of Org at the first opportunity possible.

We can also draw the indifference curves for the elite of Sland, $I_{Le}(F,R,\beta,\gamma,T)$. In our theory, the main difference is that β and R enter differently - not due to ignorance or stupidity, but for good rational reasons. R has the reverse sign in the indifference curves of people and elite. Consider the indifference

21.   The figure is shown so that we look mostly at the values where T > 0, for reasons to appear in a moment. Note that
        for a big country people may believe that they gain power in Org, so that the indifference curve starting in (0,0) has
        a negative slope, so that it takes a bend below the γ-axis before it turns upward.

curve, I_{xf}, for the representative person Ms X, who belongs to the people, and then enters the elite. Obviously, I_{xe} moves right (on the figure), when the change occurs - the whole map is shifted to the right, and the curves become flatter. We can also assess how the curves change due to the different perceptions of β. Consider again Ms X. While she belonged to people, she disregarded β, but when she joins the elite, she obtains a positive utility from β. As γ and β are approximately proportional, we may simply take the new I_{xe} as x times the old I_{xf}, where x > 1 is some factor of proportionality.

On the figure we have depicted a bold dotted line, Ω_{Le}, as the bound for the lens of the elites. Ω_{Le} also starts in (0,0) and then proceeds at a flatter path relative to Ω_{Lf}. In the same way we can add a whole set of additional indifference curves for the elite, but the reader can probably imagine how it would all look without cluttering the graph.

III.2   The bound for Org's indifference curves regarding the contract A

Figure 4 shows the indifference curves, $I_O(F',R',β',γ,T)$, of Org regarding the contract. There is one $γ_{id}$ showing how a fully »whitewashed and legalistic« country will fulfill the contract. No member country behaves like that - everybody tries to do some free riding,[22] but there probably is a limit, γ*, which Org do not allow any country to cross, so γ* < γ < $γ_{id}$. My impression is that the interval from γ* to $γ_{id}$ is rather large in the case of EU. The Greek and the British do very much as they please, without being kicked out of the organization. And, we Danes have been allowed a γ, well below $γ_{id}$.

The other variable shown is T (as before). If Org was free to chose it would give Sland as little as possible. The indifference curves are flat to the right of $γ_{id}$, but they must bend downwards to converge towards γ*, and Org has a higher utility for a curve with a lower T than with a higher T at the flat part. The drawing is here complicated by the fact that rules exist giving Sland a »right« to a certain T_g, at the time of the entry according to the rules at that time. The rules are amended each time a new member joins, but there is an expectation, and new members get different offers from Org, when they negotiate a treaty. This has been the case for the EU, anyhow.

In the EU-case two considerations work to determine the T offered, as T_g is affected by two main factors. (a) Agricultural exports and (b) relative poverty. Both factors may work to give Sland a considerable T. And, then during the membership T changes. When Denmark negotiated, it had a large agricultural export and received a high-T offer. When Norway negotiated, it was both rich and without agricultural export, so it got an offer with a low T. The bold Ω_o-curve that starts as a tangent γ*, and goes up to the maximal T acceptable by Org is thus different for different Slands. The set of curves drawn on Figure 4 are thus for a country like Denmark or Ireland, who had an offer of a high T.
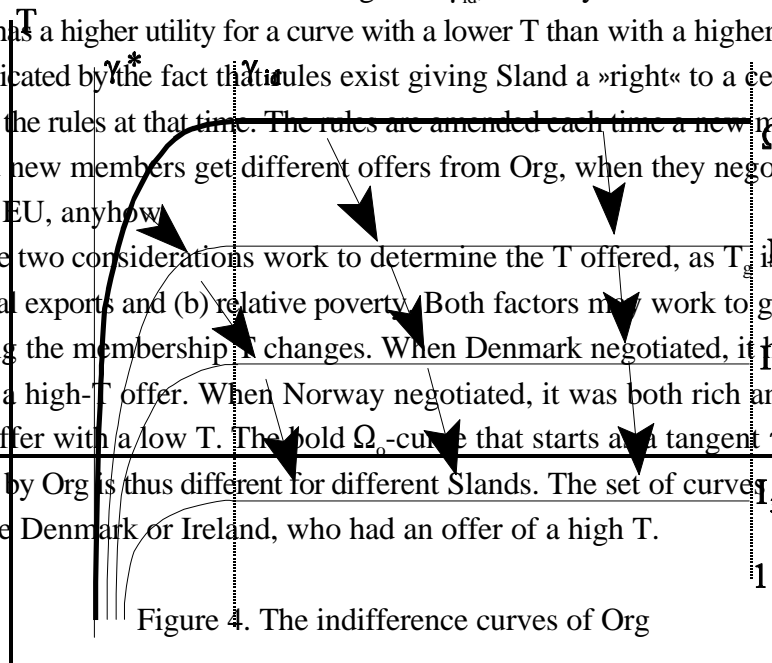
Figure 4. The indifference curves of Org

22.   In the EU a great deal of brinkmanship seems to go on at the Ω_O-border. Some countries have national exceptions from EU rules, they fail to abide by. Others are very slow to use the legal machinery to pursue their citizens, when they cheat the EU. All countries have experienced that the EU court has declared one law or another to be against the treaty. Everybody wants special exceptions, so all γs are well below $γ_{id}$.

As before, we need to consider how the curves depend upon F', R', β'. It is easier, for now we consider the three variables for the whole of Org - hence the »'« - on the variables. F' shows how much the F of Org changes if Sland becomes a member, R' how much the R of the Org changes etc. They hardly change if another small country enters or leaves the large organization. We conclude that $I_O(F',R',\beta',\gamma,T) \approx I_O(\gamma,T)$.

III.3   The large and the small lens between Sland and Org
When Figures 3 and 4 are superimposed, we obtain an Edgeworth-box. Not to make the resulting graph too hard to read we have included only the bound-curves - that is the Ω's.

Figure 5 shows how things look in the case we term the »Danish« one, as Org offers a large T. Here a small lens exists, where contacts can be made, which are acceptable for both parts. It also appears that a much greater lens exists for the elite and Org. The bound-curve for the elite is situated in the direction generating a larger lens, and hence gives a larger addition in the. We therefore have a small lens for the people and Org and a large lens for the elite and Org.

Figure 6 is our »Norwegian« case, where hardly any T is offered. Here no lens appears between people and Org. However, there is a lens between the elite and Org, so from time to time the elite negotiates a treaty and puts it to a referenda where it promptly fails.

In connection with the EU the reader may also consider related cases. The Swedes probably still see themselves as a great power. The Finns have the problem of an unpredictable bear in the back garden, so they have a potentially large F. The Belgians got the largest F of all, by having the capital of Europe, and Ireland obtained a big T. However, in all the small EU countries there is the same gulf between elite and people according to the Eurobarometer. In fact there is a gulf also in the big countries.

Figure 5. The two lenses between Sland and Org - the »Danish« case

Figure 6. The one lens between Sland and Org - the »Norwegian« case

In a broader perspective our analysis has an interesting implication. It shows why it is difficult for a small country to join a large organization with a large β. If people does not take β as something real, they must have something else as a compensation for the loss of sovereignty, γ. Either a nice big T (as Denmark, Greece, Ireland or the Netherlands), some special political advantage (as Finland) or a particularly large F (as Belgium). Both Island and Switzerland know that they would get a negative T if they joined - they have not even tried to negotiate - they know that they get almost all of F in any case.

III.4   EU as a dynamic Org: growing out of the lens

Our main example is EU. It is an Org with the interesting aim that β (and hereby γ) is dynamically growing. The treaty itself contains promises looking as (1). The promises are vague and have to be interpreted; but there is a goal of ending up with an ambitious integration. Let us assume that the goal has to be reached

during the 21st Century.

$$\gamma_t = \beta_t \to \beta_M \quad \text{for } t \to 100 \tag{6}$$

The goal β_M is not a full integration (to $\beta_M = 1$), but rather an integration to some federation as the USA or Germany. That is the aim is some $\beta_M = 0.50$. The hope probably is to hit the optimal β^* (see Figure 2) for the average country. The countries have to reach the same $\beta_M = \beta^*$. However, the optimal β^* is larger in small than in large countries, so presumably a compromise will be reached, where the large countries become too integrated, and the small countries become too little integrated.

Irrespective of the interpretation of the treaty, it is clear that the dynamics promised by the treaty means that the β's have to grow a great deal in the future. The next great step is the introduction of the EURO and the upgrading of the budding ECB (European Central Bank) to a real central bank.[23] If this is depicted on Figure 5, it means that the point of the contract $A = (\gamma, \beta, T)$ will move to the right. It is likely that it will move from the small lens into the excess part of the large lens. The elite will support that movement, but it will gradually turn into a political tension between people and elite. That is a majority of people will come to want to leave Org.

In addition T is dynamic. The big positive T's that several small members obtained when they entered EU suffers from the problem that the rules are changing. In particular the big net contributor Germany is unlikely to continue paying as much in the future as they did in the past.[24] Also the more diffe-rent the new members become, the more difficult it is to have rules that generate large payments in extreme cases. Hence the T's are likely to fall for the old members - as has already happened. However, there is a counteracting force. When β grows so does F, though F grows less and less as β approaches β^*, as discussed in Section II.1. Both the dynamics in β and T and the reduction in the growth of F serve to make it less likely that the contract between Sland and EU can stay within the lens. This analysis thus predicts that the development threatens Sland's EU-membership. There is a dynamic problem. The small lens shrinks as T falls, and γ's growth pushes the contract out of the lens to the right.[25]

III.5   Generalizing the model

This model is easy to generalize. We shall sketch two generalizations: (A) to big countries and (B) to the

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23.   We note that the various European central banks contain a group of the elite who have been keen proponents of the EU. However, they are much less keen on the EURO than they were of the previous steps. The reasons for the change of heart are not difficult to understand. It is much better to be a central banker than a bureaucrat in the local office of a European Central Bank system.

24.   The two main reasons why Germany accepted a large negative T probably were: (1) The German horrors made Germany politically weak. (2) The key national aim of Germany was to obtain a reunification - it was an important aim to »buy« support for that aim. Obviously, (1) becomes less important with each new generation of Germans. Also, Germany is now - once again - unified.Furthermore, (3) the unification is a great financial burden for the Germans - this puts pressure on the large expenditures to the EU.

25.   The model helps us understanding the Danish EU-policy. The politicians know that they have a difficult and growing political problem to solve. They need time and hope for the resistence to EU to erode (as discussed in Section IV). They get time if the speed of integration is reduced. This can be done in three ways: (i) Individually by reducing γ relative to β, and collectively (ii) by fighting against the various individual steps of integration and (iii) by adding as many new members as possible. These policies all have costs: (i) and (ii) cost influence in the EU, and (iii) is a threat against T. However, to delay the integration is an overriding purpose, under the circumstances.

colonial liberalization process.

A: The big-country case. The main reason to treat the case of a small country as a particular one is the assumption that people care about γ and not about β. In a big country it is different. Here people are accustomed to be further away from the government than in a small country. Also, they take it for granted that their country plays an important role in the world - a role often much exaggerated in the public mind. It is thus much less likely that there is an asymmetry in the assessment of the two power-variables. If anything the asymmetry might even be the other way - causing the indifference curves to have a negative slope around (0,0). There is still an asymmetry as regards R, but the indifference curves are likely to look quite different. The reader will see that we have constructed a theory that produces the same result as Olsen & Zeckenhauser (1966) - that is, the small countries get the best deal in the Organization. However, it is more due to a self selection bias than free riding.

B: The colonial liberalization process. The colonial contact was based upon the use of force - in the beginning little force was actually needed.[26] However, that was in the 19th century, and during the 20th century it became less and less easy to uphold the control of one country by another. Hence, it became necessary to reduce the use of force in the relations between countries. So, as less power became acceptable, there was a movement toward the voluntary contract. Since the contract included some domination - that is a positive γ - it became more and more necessary for the colonial mother-country to pay, to compensate the colony for the γ that gives disutility.

The result has been that all large colonies became impossibly expensive. Even the Soviet empire became very expensive in the end. Hence, most colonies were given free - sometimes after some violence, but mostly voluntarily and with relief. However, a number of very small countries have remained as voluntary member-countries of a union. In Paldam (1996) the same model as above is used to analyze such a case, where the old »mother country« has accepted to keep a former colony as a member of a union, while γ has decreased to almost zero, and T has increased to an amounts of $10'000 per capita. The last of the »colonies« have ended up as bizarrely expensive voluntary parts of a union.

IV   Will the resistence to EU erode over time?

Our model thus gives us an ominous dynamics, where the small country, Sland, finds it increasingly difficult to stay in Org, the organization. There is, however, a possibility which has often been proposed as the solution. Maybe Sland will become accustomed to the membership, and the resistance of people will erode. Consider, once more, Figure 1 showing the development in EUs popularity over more than a quarter century. No erosion is apparent in the series. However, there has been a steady increase in the two integration-variables (γ and β) during the last 25 years of membership, so without any erosion the popularity of EU should have dropped.

IV.1   How does the popularity function of EU look in Sland?

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26.   The small sizes of the colonial armies dominating large areas illustrate this point. In the beginning, the new »white masters« were seen as relatively benign in many colonies, compared to the previous local masters.

The model for the popularity of EU emerging from the previous pages must look a great deal like the one for I_f that is peoples' indifference curve as regards EU:

$$\text{Pop}_t = \text{Pop}(\gamma,T,F,R,t) \approx \text{Pop}(\gamma,t), \text{ where t is time} \qquad (7)$$

If we take the graph for Pop_t shown on Figure 1 to be trendless we may argue that the erosion in the resistance to EU corresponds roughly to the growth of γ. This appears a coincidence. However, there are a couple of sudden movements in Pop_t on Figure 1. With a little imagination they can be taken to correspond to known movements in γ. If that is the case, we can see the long-run constancy as an indication that Pop_t returns to the old level. In other words, there is a natural level for Pop_t. We thus have two hypotheses:

Table 2. Two hypotheses on the resistance erosion

Hypothesis 1: The *erosion is constant*	People get accustomed to status quo with a constant underlying rate. $\partial\text{Pop}_t/\partial t > 0$. If γ keeps constant $\text{Pop}_t \to 1$.
Hypothesis 2: Pop_t has a *natural level*, Pop*	Pop* depends upon factors which are hard to change - not on γ. When γ changes, Pop jumps in the reverse direction; but it later returns to Pop*, as people adjust to the new γ.

To assess hypothesis 1, we need to know the path of γ in the period. No attempts to measure γ have been made, and even at the conceptual level it appears a difficult variable to quantify. My own hunch is that γ has grown a little, but not much.[27] So if hypothesis 1 is true, we have to conclude that the erosion process is very slow. This is possible; but I wonder if it is likely? In fact, neither of the two hypotheses appear to be well supported by available facts, though perhaps the evidence supports hypothesis 2 slightly more than hypothesis 1. Also, the hypotheses are easy to merge and to make much more complex. A main problem is that there are too few polls to make a formal empirical analysis.

The only possibility for gaining some insight in the two hypothesis is thus to look into the theories and findings on related phenomena. That is the popularity of other political agents.

IV.2   Can we learn something relevant from the VP-function literature?
A large literature analyzes the *popularity of governments at polls and elections*. However, it seems that no paper exists dealing with popularity of EU. The leading survey of the VP-literature appears to be my own (see Paldam, 1981, and the successor Nannestad & Paldam, 1995). I shall thus allow myself to be dogmatically brief.

The theoretical basis of the literature is the *responsibility hypothesis*. That is people hold the government responsible for the changes in the economy. This is already a problem - for if people holds the government responsible for the economy, what does they hold EU responsible for? A few speculations on this matter will follow.

Two results in the literature deal with time adjustment. They are both among the most robust

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27.   Sometimes the words announcing the joint policies are almost pathetically far from the deeds. Think, eg, on the declarations about the joint EU foreign policy. It has led to no joint deeds in any important issue I can think of.

results. One main result concerns voters' myopia. It essentially says that voters adjust quickly. That is, if a change occurs in either a political or an economic variable causing a change in the popularity of the government, then the effect (or at least 2/3 of the effect) goes away within a year. This result may be taken to be relevant for hypothesis 2. If Pop_t returns to Pop*, we may expect the return to be quick.

The long run result is the *cost of ruling* result. That is, the return is not to a constant Pop*, but to a softly downward sloping trend for the government. The average government loses about 1.7% of the vote just from ruling. That is the party (or parties) ruling loses 0.4% of the vote per year. This is a very robust result.[28] However, it appears irrelevant for the popularity of the EU.

IV.3   The governments and EU's popularity - plus a summing up

If we want to use the VP-function literature, the key problem is that there are two levels. The national government and the EU. The closest one finds in the literature to the government/EU duality is the French case with both a president and a government to split the blame. The US case is a bit similar with the Congress and the President being independently elected. In these models one often see a complex intertrade of popularity between the two levels - often in the form of »coat-tail« effects where the popularity of the most visible agent rubs of the less visible one. Once again it appears dubious if this is relevant. But perhaps two connections do exist:

 C1.   Maybe there is a coat-tail effect: $\partial Pop/\partial VP > 0$. The voters may want to punish/reward a govern-ment by sending it signals at a EU referendum or poll. Perhaps such a connection is likely, but it is not strong in the data.

 C2.   The EU is less popular among left-of-center voters than among right-of-center voters (at least in Denmark). This is often said to imply that a left-of-center government is more likely to be able to carry through an EU referenda.

S2 relies on a »can« and a »will« claim: Only a left-of-center government *can* convince left-of-center voters to vote yes. Also, it is likely that a left-of-center opposition *will* make small efforts only to convince their voters to vote for the theme the right-of-center government has proposed for the referenda. The right-of-center voters are likely to vote yes in any case.

V.   Concluding remarks

When the Danes voted no to the Maastricht treaty in 1992, the Economist showed a grand front page with a longboat of foul-looking and fairly dirty Vikings. They were surely against. Looking at the picture one got a clear impression the elite of the country had good reasons to fear the great unwashed. And, sure

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28.   Several explanations exists for the cost of ruling. The best explanation - in the sense of integration into other reasonable theories - is the *grievance asymmetry*. It says that improvements in relevant economic variables are rewarded less than deteriorations in similarly relevant variables are punished (see Nannestad & Paldam, 1997). Imagine that n variables are similarly important. The average government will manage to steer half these variables above average, but as it is an average government it will steer the other half of the variables below average. The grievance asymmetry will cause it to lose. It is easy to show that one can get the average size of the cost-of-ruling with reasonable orders of magnitudes for the coefficients.

enough Danish politicians do fear everything pertaining to the EU - they know these are dangerous issues, where they can easily harvest a defeat.

Above we have made a small theory explaining how a steadily ongoing process of integration inevitably will run into trouble, leading to a break between the small country considered and the international organization. The only possible escape from that predicament is if a process of erosion undermines the resistance. It has often been claimed that it does exist; but we have found no signs of its existence, and only very weak theoretical reasons why it should exist.

However, to this problem is a corresponding problem of existence of possibilities. The small rich NW-European countries are not faced with a choice of all the possibilities they may want. If they were, most Danes (and probably Norwegians, Swedes, etc.) would probably choose a different organization from the one of EU, provided it consisted of approximately the same members. The Danish opponents of the EU are never tired of proclaiming how much they want international cooperation, but it should be very different from the one existing. This is a cheap stand, but it shows that there is a problem.

So maybe several of the small EU-countries are moving towards some sort of semi-membership.

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