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A case study of engineers in Europe

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ABSTRACT: Analyses of European governance usually put the member states in the foreground, placing the citizens in the background. This article brings explanations of EU legitimacy down to the level of individuals. A method is suggested that combines explanations based on individual interests and a sociological approach to identity. The paper investigates how work organisations become levers for a European outlook that may release legitimising from its national context. The individual level analysis is carried out for one particular occupational group (engineers) and the research questions are elucidated by case studies.

Keywords: Legitimacy, Social Capital, Social Identity, Civil Society, Open Methods of Coordination

JEL classification: H70, L50

1 Introduction

In some EU countries, patent protection is five times as costly as it is in the US and Japan. These costs could be reduced for EU institutions that give inventors the option of obtaining a patent that is legally valid throughout the EU, by using a single application to the European Patent Office. To help technology producing firms and other owners of patents avoid the risk of legal action before national courts in each member country, a centralised community court could be set up to rule over disputes arising from Community Patents.¹ Further, would these efficiency improvements increase the legitimacy of the EU? In trying to answer this, I note that there is no agreed upon view of democratic legitimacy in the EU. The three liberal-democratic criteria of legitimacy (performance, democracy and identity) that are usually applied to the national states are sometimes applied to the EU (Beetham & Lord 1998). There is some consensus that democratic legitimacy rests on both substantive and procedural values. While procedural values concern the degree to which groups in the population exercise influence through voting and participation in decision making (input-based legitimisation), substantive values indicate that a public service is democratically legitimate if the users are satisfied and believe that production is run efficiently (output-based legitimisation; Jacobsson 1997; Erlingsson 1999).

The previous vice president of the EU Commission, Leon Brittan (1998), defends shifts of sovereignty to the supra-national level by arguing that people are willing to accept reductions in legislative sovereignty as they provide welfare returns. Brittan highlights the need to bring the analyses of EU legitimacy to the level of individuals. This is in accord with scholarly observations that analyses of European governance usually bring the member states into the fore, placing the citizens in the background (Svetlozar 2004). It is interesting how European citizens become aware of a supra-national political system in Europe and make it legitimate, which brings us to the aim of this paper: to suggest an analysis of EU legitimacy based on the politics of individuals.

The legitimacy of those who rule the EU cannot be determined easily by voting results (i.e., elections to the EU parliament). It is unclear whether low voter turnout is a signal to politicians that citizens are satisfied with the way Europe is governed or a signal suggesting lack of legitimacy. If a voter is satisfied, she or he may not see any reason for obtaining information or spending time

¹ “Activities of the European Union – Summaries of Legislation: Intellectual Property” and “EU Institutions Press Releases: Results of the Competitiveness Council of Ministers, March 2003”.

voting. A method for studying legitimacy is outlined in this article, which puts the emphasis on properties of the civil society and the way social affiliations forge links with political institutions. From this perspective, social groups have meanings that influence the ways people respond to political institutions. Thus, the method suggested in the following is based on a mixture of individual interests and sociological approaches to identity. It is associated with work by Akerlof and Kranton (2000, 2002), Coleman (1990) and Burt (1992). In applying this method to studies of EU legitimisation, I also recognise the criticism of the state-centric and hierarchical tradition of democratic thinking and point to the importance of democracy based on society rather than the state (Mörth 2004). The EU has both an element of hierarchical democracy with binding legal rules and an open method of coordination with open structures and networks, with participation of a wide range of societal actors.

The power of the EU is often justified on utilitarian grounds: supra-national institutions are required to satisfy needs and values in a cost-efficient way. In this article, I try to widen this perspective to encompass how social identity motivates preferences for EU policies. I note the low identification with the EU and recognise that the indirect model of legitimisation points to two types of incorporation to deal with this difficulty (Beetham & Lord 1998): incorporation of national governments (make use of the legitimating force of national identities) and involvement of organised non-governmental actors that are most affected by EU policies. The indirect model is inspiring because it draws attention to the role of non-governmental actors. Yet, it seems to be bound to a low level of EU identification and becomes awkward when the consequences of EU policies for one group of societal actors depend on actions taken by citizens within other social affiliations. This article suggests solutions for this.

The research questions are examined using explorative case studies, with a focus on work organisation. Further, the focus is on one particular occupational group and the way this group creates lasting relationships with European institutions. The study concentrates on Danish engineers, who are well-educated and probably have a more positive attitude toward the EU than do average citizens. Accordingly, these case studies reveal significant information as basic mechanisms and actors involved in EU legitimisation are activated. The first suggestive finding of the study, which is apparent in the context of the regulation of intellectual property and standardisation policies, is that engineers become aware of how Europe is governed through

Europeanised work-relations. By building social relations that serve in the interest of loyalty to the employer (cooperative capital), the engineers can get side-payments in exchange for transfers of sovereignty to EU institutions. This individual-level policy helps the legitimisation of EU legal activism in the field of intellectual property. However, the findings suggest that there are obstacles to a smooth adaptation of national traditions and institutions to European integration. The interviews suggest that engineers value local interaction within professional networks (independent capital) and smooth adaptation requires that these values easily be reduced to a monetary equivalent (or any other obvious measure of side-payments). The second suggestive finding concerns European identification with norms for efficiency and fairness within important policy areas. This negates difficulties associated with interdependencies between European communities (problems of identity externalities) and with idiosyncratic norms. The finding also points to shortcomings of the indirect model of legitimisation.

Section 2 is devoted to a discussion of models of legitimacy. The article goes beyond the distinction between output- and input-based legitimacy by drawing attention to EU governance based on the open method of coordination with participation of a wide range of social actors. The method for analysing occupational groups draws on the notions of social structure of markets and bridging relations to describe how members of these structures forge and sustain relationships with political institutions (section 3). The explanations offered are based on findings from interviews with, and questionnaires administered to a small sample of Danish engineers. The research questions are addressed in view of a few political practices in the EU, which also are identified in this section (section 4). Section 5 outlines a perspective on individual-level politics using the ideas presented in the previous sections. A framework for analysing legitimacy in terms of social affiliations is suggested and its applicability to studies of occupational groups in the EU is examined (section 6). Section 7, finally, contains a few concluding remarks.

2 Theoretical issues

The analyses presented in this article derive from an impetus to understand EU legitimacy by justifications that rely both on utilitarian principles and on social identification. Thus, the analyses are concerned with the classic dilemma in democratic theory between effective problem-solving and democratic processes that have a firm basis in constituencies with a common identity. This is the

dilemma between output-based legitimacy and input-based legitimacy (Mörth 2007; Sharpf 1999). The former type of legitimacy is emphasised in economic analyses of European institutions, where Transaction Cost Economics tend to depreciate the importance of institutions for civic participation. This literature argues that costs of collective bargaining increase with democratic representation and participation, which may reduce the social gains of a governance system (Tirole 2001; Hansmann 1996). Transaction costs are also considered high when political credibility is low. In this case, European institutions can become attractive to citizens. A single market in Europe, for instance, helps the growth of an efficiency-oriented policy provided by experts and regulatory institutions, such as the European Commission, isolated from political pressure (Jachtenfuchs 2001). Accordingly, a political agent who lacks adequate expertise may increase his or her credibility by delegation of tasks to individuals and organisations that are not directly accountable to the voters or their elected representatives (Majone 1996).

The economic approach has some bearing on EU legitimacy: while liberal democratic institutions still are underdeveloped in EU governance, the legitimacy rests on efficient delivery of services. This article emphasises approaches to EU legitimacy beyond this dilemma by focusing on EU governance as an open method of coordination, with open structures and networks and participation of a wide range of societal actors (Mörth 2007). This method, which involves organised non-governmental actors according to the indirect model of legitimisation (cf. section 1), wipes out the boundaries between a public and a private sphere by recognising the role of the civil society in policy making. It encourages the efficiency of EU policy making and it also has democratic potential based on participation by societal actors. The open method of coordination implies that some rules are authoritative (but not legally binding) because they are made by private actors. It also points to the role of EU experts and non-governmental actors, who are not accountable to the voters. However, there is no guarantee that they will increase the authority of the EU. Instead of becoming a lever of increased legitimacy, regulatory institutions that give expert advice (in business, law etc.) may create opportunism. One issue to examine is whether the open method will fail, because many Europeans seem to be sceptical about the credibility of European elites and this scepticism seems to be grounded in a lack of identification. This issue is tackled in the following, where examination of social identity and sense of belonging within the civil society are crucial for a better understanding of EU legitimisation.

Schmitter (2001) defines legitimacy as “a shared expectation among actors in an arrangement of asymmetric power such that the actions of those who rule are accepted voluntarily by those who are ruled because the latter are convinced that the actions of the former conform to pre-established norms” (p. 1). Assuming that behaviour is governed by a set of norms shared by “those who rule” and “those who are ruled”, Schmitter argues that there are common institutions whose foundations are in generally accepted rules affecting all parties. Yet, European integration is pluralistic and “will protect the diversity of experiences rather than attempt to assimilate them into a single ‘European’ culture or identity” (*ibid*, p. 13). This suggests that legitimate European institutions develop within smaller islands, with favourable conditions for community. Schmitter refers to these islands in terms of “fuzzy” practices of governance or deliberate “European Governance Arrangements” (EGA), to which power is delegated; these have purposes and rules for reaching decisions. This view of the EU as composed of multiple governance practices and multiple collective identities seems to be shared by Sharpf (1999), who calls attention to various legitimising mechanisms that presuppose the existence of “identifiable constituencies”. The only requirement for legitimacy is that all individual interests can be interpreted in terms of institutionalised norms that serve public interests (*ibid*, p. 13).

The analyses presented in this article recognise the importance of a pluralistic integration in Europe. They also consider the role of European values produced through self-abnegation with respect to individualistic, national or professional conceptions. This seems to be a departure from Schmitter’s and Sharpf’s approaches, which neglect norms that are widely recognised among European constituencies. For example, there are common rules for transparency and reasoning that help problem-solving processes, where persons in different communities are aligned by “institutional arguing” (Neyer 2003). Legalisation is a necessary instrument for structuring this discourse, and legalism dominates much of EU politics.

3 Research outline

The current research is based on a case study design. Different sources of information are used, including in-depth interviews with four Danish engineers. Understanding of how EU legitimacy emerges requires that the selection of interviewees at the least cover entrepreneurial engineers (who set up their own firms) and employed engineers (employed either as civil servants or in the private

sector). Engineers are also involved in university research or are working as researchers in private firms. The interviewees participating in this in-depth study were purposefully included in this sample to increase the probability that the opinions and attitudes of all these perspectives are reflected in the collected data. *Anne* was educated at the Royal Veterinary and Agriculture University and at the Danish Technical University. She finished her studies in 2000. Since then she has worked as a researcher in a middle-sized biotech firm producing enzymes and microorganisms. *Peter* finished his education at the Danish Technical University in 1981. His dissertation is on automobile engineering, which motivated him to take a job as a civil servant in the road safety and transport agency within the Danish Ministry of Transportation. Peter has worked there ever since he left the university and is now the head of his department. While Peter is employed in the state administration, *Jacob* is employed by a local government, providing counsel on water and purification works. He is educated as a construction engineer, completing an upper secondary engineering course in 1985. During the first three years of his career, he worked for a consulting firm and before starting to work for the local government, he was employed in a firm of contractors building plants for power supply and heating. *Allan* is an assistant professor at the Danish Technical University who specialises in computerised network-communication. He is a lecturer and a researcher, but he is also starting up a firm in collaboration with five young researchers from his university. They have joined up with two engineers with long-term work experience in various industrial firms.

Engineers are affected by the European Union integration through their work. Peter approves vehicle designs. He uses EU standards and also participates, together with colleagues from other member countries, in the working out of European technical standards for road safety. Peter is upset about the ignorance of rules for disclosure of information (the principle of public access to official records) and associates this ignorance with EU policies on technology secrets (intellectual property). In practice, documents are made available to the public after a technical design is available on the market. Competition among road safety agencies is another reason for Peter to be upset. A certificate issued to a producer in one member country is valid in the whole union. Because routines for issuing certificates vary between countries, producers are in a position to play off the road safety agency in one EU country against an agency in another country. Allan gets half of his research budget from the EU, implying that he is directly involved in fund-raising in Brussels. He and Anne (employed as a researcher in a private company) worry about their compensation for

inventions. Inefficient patent regimes in the EU make Anne's income uncertain and also increase her costs of communication across firms and universities (more contractual regulation, more use of project managers and lawyers). Allan, who is setting up a new firm (a spin-off from university research), acknowledges that patents are needed to satisfy the financial market. But large firms "do whatever they want". They know that most small and middle-sized firms cannot afford to protect their intellectual property, and they show no respect for patent holders' rights if doing so serves their interests.

The current case studies concentrate on how the interviewees' opinions about the EU depend on Europeanisation, understood as the domestic impact of EU institutions (cf. Radaelli & Pasquier 2006). The findings indicate that interviewees facing weak Europeanisation effects, thus having difficulty seeing how changes in their work situation derive from the EU, are distinct from interviewees facing strong effects. Jacob is employed by a regional government, which is not involved in technology competition. He protects his own technological secrets without any legal support of the EU. Jacob, like Peter, recognises there are difficulties with the principle of public access to official records, which makes some of the suppliers of technology hesitant to forward critical technological knowledge to local governments. But unlike Peter, he considers this quite normal for companies operating in competitive markets. Jacob does not associate these difficulties with European politics and it is tempting to conclude that the Europeanisation is weak for engineers employed by regional governments. However, the notion of Europeanisation should take into account the impact of the open method of the EU, which invites European regions to take part in EU policy making. Europeanisation is more easily seen in this involvement, but the tradition for regional empowerment in European policy networks is weak among Danish regions and local governments (Gunnarsson 2003). This may explain Jacob's inability to see connections between politics at the EU level and work-related topics.

To explore the formation of opinions about the EU, the case studies also focus on individual-level politics, which are associated with the altering of the engineers' power to exercise influence on economic compensation and professional norms. Two instances of this type of policy are emphasised in this article. One concerns the idea that the need to protect income requires identification with the employers. Engineers join communities together with employers, for instance, to protect technological secrets. The second type of policy is demonstrated by Jacob's

case; he keeps technical secrets to himself and safeguards a proper level of economic power in the labour market as a member of a professional network. A community of professionals acts independently of employers and signals to the labour market that they are professional in their approach to their jobs. These communities are advantageous, because they sanction a high professional standard among their members. A professional network is also attractive for Peter, who experiences conflicts between markets for intellectual property and public rules for disclosure of information. He feels growing uneasiness as administrative practices have to be adjusted to fit economic interests. Similarly, engineers involved in university research (e.g., Allan) are dissatisfied because the national governments and the EU commercialise research. Professional communities provide the power needed to resist the negative consequences of market forces.

The coevolution of Europeanisation and individual-level politics is examined in the context of two types of EU technology diffusion policies: regulation of intellectual property and standardisation policies. To provide a solid foundation of theories and methods applied in studies of civil society, the notion of social structure of markets can be used. This notion builds on the idea that social relationships and networks are social capital, which increases the economic value of transactions in markets (Burt 1992). It associates individual market values with power that derives from the membership of social groups. Relations between social norms and individual preferences are also discussed by Akerlof and Kranton (2000, 2002), Coleman (1990) and Putnam (1993, 2000). One lesson to be learned from them is that the communities that develop by individual-level politics belong to the civil society, which is not regulated by the state through the law. Instead, social relations depend on moral obligations and emotional ties (Narotzky 2006). For the purpose of examining political aspects that include the larger society, the analyses here use “bridging relationships” or the “autonomy” of social capital (see Narotzky 2006). These relationships describe the ability of individuals within the networks to forge and sustain social relationships with individuals and institutions outside the networks. Narotzky refers to the opening of the European market to Chinese produced shoes and mentions that entrepreneurs in Vega Baja (Spain) appealed to the EU Commission and to the WTO rules through their associations in order to increase tariffs on imported Chinese shoes.

In the current analyses, the notion of bridging relationships is used to describe responses by engineers to the politics of EU institutions. It puts crucial complementary aspects of the social

structure of markets on the agenda by describing how the engineers ensure flows of critical resources, both from markets and from institutional environments, which is crucial in the evolutionary theory of institutions (Hannan & Freeman 1977, 1989; DiMaggio & Powell 1991; Gunnarsson 2001). The following examination emphasises how opinions about EU institutions (i.e., the legitimacy of the EU) develop together with properties of social market structures and different bridging relationships. According to the indirect model of legitimisation (see section 1), EU legitimacy derives from the involvement of organised non-governmental actors affected by EU policies. The involvement of, for instance, representatives of social market structure in governance could increase the legitimacy of EU institutions. The legislative and the administrative processes are perceived as legitimate, because citizens feel they have the power to influence politics when they have supporting social networks or communities.

4 Method

My approach to analysing legitimacy has developed through the examination of official documents and documents of the Danish Society of Engineers and the EU concerning policies on intellectual property and standardisation. This research has contributed to a better understanding of how Danish engineers are affected by EU policies. It also provides insight into the bridging relationships that connect individual-level politics with EU institutions in the two policy areas studied. Two types of legitimisation are emphasised here. In the first type, EU institutions are underpinned by the legitimising force of norms shared by the European populations, whereas the second type is based on idiosyncratic norms embedded in various communities. Legitimacy of EU institutions develops in tandem with the involvement of the communities in the governance according to the indirect model of legitimacy.

Issues concerning intellectual property are covered by the EU's single market programme. All member states take part in the Munich Convention on the European Patent, which gives inventors the option of obtaining a patent legally valid throughout the EU by means of a single application to the European Patent Office. A Community Patent and a centralised community court to rule on disputes arising from Community patents are under preparation². The treatise of Rome contains

² "Activities of the European Union – Summaries of Legislation: Intellectual Property" and "EU Institutions press releases: Results of the Competitiveness Council of Ministers, March 2003".

principles for legal action, from which markets for intellectual property probably will be institutionalised through decisions by European courts and the Commission without much political attention (cf. Brittan 1998; cf. Scharpf 1999). When examining other policy areas, it is apparent that transfers of sovereignty to the supra-national level sometimes are motivated by the Community court, which is the active driver (judicial activism) rather than political decision-making and traditional democratic institutions of national government (Sindbjerg Martinsen 2004). This suggests that the intellectual property area is becoming an example of the above-mentioned first type of legitimisation. Contractual relationships are sanctioned by EU laws that conform to generally shared norms in Europe. Moreover, standardisation policies are affiliations of the EU's single market programme, but their institutionalisation has other drivers. Judicial activism is less important. Instead, EU standardisation develops mainly through voluntary activities within the national contexts. These activities are coordinated by European expert committees that perform some form of trustworthy quality control. EU politics of standardisation are an example of the second type of legitimisation described above.

Within this framework, the goal is to develop a perspective on the legitimacy of EU institutions using data gathered from interviews with engineers. The same list of questions was used with each participant, including candid questions about a small number of themes. The main theme concerned the professional network; specifically norms for technology-sharing among colleagues (within and outside the work place). Other important themes concerned attitudes towards private-public relationships, governmental regulation of technological information, and exchange of information about careers as employees and as entrepreneurs. One sub-theme was the degree to which interviewees' trusted the national government or believed that sovereignty should be transferred to the EU. Each interview lasted for about one hour.

The engineers also completed questionnaires concerning their opinions about intellectual property (patents and licences) and about the importance of various sources of advice (professional advice and advice about careers). The respondents were asked if they agreed with statements about patents and licences (interval for agreement from 1 to 5) and to assign a value (from 1 to 5) to various sources of professional advice and advice about careers. To understand better the legitimisation of the EU when interdependencies and conflicts among social affiliations are prevalent, a third

questionnaire was administered to the interviewees. A detailed presentation of this questionnaire is given in section 6.

5 Social structure of markets

Vignettes concerning the interviewees' social and professional relations illustrate how data gathered from the interviews were used. These relations and networks are tools the interviewees use to gain power in exercising influence on economic compensation and to defend professional norms. Thus, the vignettes provide insight into the politics of individuals. Anne often takes the advice of workmates who have specific experiences in biotechnical research. When conducting experiments, she also draws on the knowledge of colleagues employed by customers, people with PhDs or researchers at the university. Like many engineers, she established contacts during her university studies and can draw on social connections with schoolmates and professors. Similar patterns are found at the universities. Yet, there are limitations on the amount of information that the researcher compiles through social relations in the work place. Allan goes to conferences to meet his colleagues. It is likely that social relations of university communities serve three types of private interests: interests of senior scientists trying to find junior researchers to work with, interests of junior researchers wanting to receive advice from senior scientists and interests of senior researchers hoping to do research together. Peter and Jacob are employed by public administrations and when Peter approves vehicle designs, he relies on technical information and on professional advice provided by colleagues. Contacts with professionals outside the workplace are rare. On the other hand, there are no internal barriers to technology-sharing and a seniority principle is applied, implying that experienced engineers tutor newcomers. In terms of counsel concerning water and purification works, Jacob primarily relies on his own knowledge obtained through learning by doing. If he needs to contact colleagues, he usually turns to engineers working for suppliers of machinery.

There is evidence that social and professional networks are affected by concerns about markets. Exchange of technological knowledge between Jacob and his colleagues is in general rare. They live on incomes of specific competencies, which fosters competition within the professional group. Moreover, the suppliers of machinery ask for economic compensation for their advice, which implies that network relations between colleagues in part are permeated with market interests. Peter

and his colleagues are also employed by a public administration that depends on market forces. They rely on information they get from domestic and foreign firms that have competencies in producing facilities for road transport. Being employed in the private sector, Anne experiences significant market influence from producer-customer relations. If the customers have contacts with rival firms, social connections for technology sharing across firms cannot be maintained. This difficulty is also illustrated by Allan, who is a customer of an American firm producing tools for research. It is true that technological information is exchanged with personnel of this firm, but “they will never tell him how their products work.”

Obviously, the actual social and professional relations are pervaded by market concerns. They also serve as the social structure of markets, which the engineers can use to gain power in exercising influence on economic compensation and to defend professional norms. This brings us back to the politics of individuals. For Jacob, it is suitable to maintain a professional network with colleagues working for the machinery suppliers. This individual-level policy strengthens his position in the labour market, as it improves conditions for doing a good job, which is a positive signal to potential employers. Accordingly, professional networks inform the labour markets about supply of specific competencies and they sanction a high professional standard for their members, which increases the members’ market value. For example, the network contacts Anne established during her studies at the technical university are important, but they are only used for general issues concerning engineering and good advice about interesting jobs. Exchange of information about specific technical solutions, which usually involves technical secrets, is not permissible. In theory, patents could eliminate some barriers to the development of social contacts. In practice, however, the transaction costs would be too high (project managers and lawyers have to be involved).

These vignettes suggest that social and professional networks have a political aspect. People have power because they belong to a social group and they use this power instrumentally in their relationships with markets. The networks are transformed into the social structure of markets, which increase the economic value individuals gain from market transactions (cf. section 3). Workplace communities serve the interests of increased compensation: Allan draws on social relations with colleagues and students at the university when recruiting people with PhDs to increase the value of the firm he is starting up. Technology produced by Allan and Anne can be marketed at more favourable prices if they can increase the willingness of their colleagues to prevent technical

secrecies from being transferred to rival firms. The same type of authority relation guarantees the acceptance of Allan's PhD students that issues concerning critical strategies of his firm are excluded from the information he communicates to the students. Generally, joining a community implies that a person satisfies his or her individual interests by voluntarily accepting to obey others (Coleman 1990). It implies subordination to authority relations based on similar interests among those involved and who vest authority to one another to serve individual interests ("conjoint authority relations"). Authority relations characteristic of employee-employer relations ("disjoint authority relations"), on the other hand, lack common norms and the community has no value per se. Rights to control actions have been transferred to a principal and those giving away these rights cannot expect that the authority will be exercised in their interests. Instead, they will get payments in return. Anne considers patents and technical secrecies the "living" of her employer as well as her living. A necessary condition for the creation of an efficient social structure of markets, however, is that loyalty to the employer is backed by sanctions within a close community of employees.

All in all, the social structure of markets (disjoint and conjoint authority relations) can be seen as an instrument for individual-level politics. An instrumental approach to market structures by engineers was found to reveal EU legitimisation mechanisms for various bridging relationships and in the context of common norms shared by the European populations as well as in the context of idiosyncratic norms.

6 Understanding EU legitimisation

Danish engineers seem to be motivated by technological professionalism and they adjust their competencies to increase competition with other professional groups³. In the following, the social structure of markets that serves the interests of a high degree of professionalism is referred to as *independent capital*. The structure of markets that serves the engineers' interests of loyalty to employers is referred to as *cooperative capital*⁴. Independent capital is associated with conjoint authority relations based on social norms prescribing that "one ought to share the technological knowledge one possesses with everybody, who accepts this norm". Cooperative capital is associated

³ Ingeniørforeningen i Danmark, "Fremtidens ingeniørprofiler – et debatoplæg om ingeniørers kompetencer og uddannelser", October 2002 and "IDAs strategiske samarbejdsrelationer og alliancer", Ingeniørforeningen i Danmark, 2001

⁴ "Identity with the employer" means that employees subordinated in an authority relation are satisfied when the interests of the employer are satisfied.

with disjoint relations and prescriptions that technological knowledge should be kept secret in order to protect the competitive advantages of the employer. These prescriptions derive from the employees' belief that one protects one's own living by protecting the earnings of the employer.

Connections can be established between these types of capital and social affiliations examined in this study. To illustrate this, we can refer to members of two social categories: engineers who think about themselves as "employees" and engineers who identify with "entrepreneurs". "Employees" act according to their identity because they believe it serves their market interests to have a safe job and unemployment compensation in case of being unemployed. They are loyal to their employers' interest in recruiting engineers and in protecting patents. "Entrepreneur identity" motivates individuals to set up their own firms and to create good will in the eyes of the finance suppliers. Instead of relying on patents, there are prescriptions saying that "entrepreneurs" balance the need of keeping technological knowledge secret against sharing technology with others. Moreover, a loyal member of this community accepts what Carree and Thurik (1999) call "control commitments". This is a specific advantage of small firms that derives from the fact that they are controlled by a small group of people, or bear the personal stamp of one person. This motivates entrepreneurs to work below the minimum wage and convince their employees to work below market prices.

Anne and Peter are considered "employees", whereas Allan and Jacob are "entrepreneurs". Anne is loyal to the interests of her employer to protect technological secrets. This loyalty is cooperative capital backed by sanctions of her workmates, which reduces job-hopping and technological spill over to rival firms. In showing interest in building cooperative capital, Anne and her colleagues may give up some of their independent capital. Anne reports that even in large firms, technical workers exchange technological information with rival firms (through producer-customer relations) and with researchers and people with PhDs at universities. This exchange, which usually is motivated by technological professionalism, is subject to costs, as patents must be arranged before communication can start. This limitation on the free exchange of technological information reduces the value of the independent capital, which is the price for maintaining loyalty to the employer. If the price becomes too high, job-hopping may become acceptable. Further, Peter is prepared to invest in cooperative capital. He and his colleagues at the agency for road safety and transport identify with their employer's interest in a growing agency. A new growth strategy relies on market motives, client-oriented case work and charging clients fees for licences. The replacement of the

actual static criterion of administration (short waiting time) with this strategy serves the interests of the personnel and heads of the agency in increased earnings and interesting jobs. Anne admits that her interests differ from university researchers and engineers, who like Allan try to set up their own firms. They are entrepreneurs who need to protect technological knowledge that is critical for their ability to compete. At the same time, they demand the independent capital that provides the foundation of public forums, where technological knowledge is exchanged and used freely. Jacob is both employed and has to protect his specific competencies, as competition within his professional group is intense. Nevertheless, like Allan he uses independent capital for interactive learning to acquire qualifications other than his core competencies and for signalling professionalism to labour markets.

To examine the research question concerning EU legitimacy, it is necessary to look into bridging relationships, where engineers forge links with political institutions. The way bridging relationships mediate the social structure of markets and, for instance, legal regulation is obvious from research findings concerning the entrepreneurial cluster in Silicon Valley. Scholars have documented how engineers exchange technological knowledge through frequent job-hopping. A high labour turnover is explained by weak trade-secret protection (cf. Fosfuri & Rønde 2004), which motivates the engineers to keep the ratio of cooperative- to independent capital at a low level. The following analytic framework for explaining legitimacy in terms of bridging relationships derives from the author's reading of the interview transcripts. The interpretation concerns EU policies on intellectual property and on standardisation. Participants' answers to the questionnaires give a hint of the importance of intellectual property and professional networks for individual-level politics (Table 1).

Obviously, this policy area is not of great concern, even if the interviewees find conflicts about patent rights and intellectual property costly and they have a positive attitude toward Community patents and a Community court to rule on disputes over patents. It is claimed that professional networks are arenas for individual-level politics. However, instead of using social connections to serve job-related politics, engineers may hire an expert or pay for membership in national associations. Sometimes citizenship by proxy is caused by communicative strategies applied by politicians, who only respond to loud voices (Lehman Schlozman et al. 1997). To have an opinion

Table 1 Importance of intellectual property and sources of advice

Opinions about intellectual property

<u>Patents and licences:</u>	Important for daily work	Lead to efficient use of technological knowledge	Conflicts about patent-rights are frequent and costly	Prevent engineers from using critical technical knowledge	In favour of Community court and Community patents
<u>Marks (1-5):</u>	2-3	2-3	3-4	3-4	3-4

The importance of various sources of professional advice and advice about career

<u>Source:</u>	Work organisations	Professional journals	Mass media
<u>Marks (1-5):</u>	2-3	3-4	2-3

about European politics is costly (information costs are high). In theory, it is arguable that workplace-based networks provide an efficient way to organise learning about politics. The questionnaire suggests that work-related sources for professional advice and advice about career (work organisations and professional journals) are at least as important as mass media.

It is assumed that idiosyncratic norms prevail in Europe (i.e., there is a low level of European identification). Different bridging relationships are taken into consideration: representatives of social structures of markets are involved in EU policy making, side-payments compensate for reductions in autonomy and consequences of EU policies within one community depend on actions taken within another community. EU legitimacy under conditions of a low level of European identification has been explored previously in the context of the indirect model of legitimisation. My suggested approach, however, incorporates an explicit governor at the EU supranational level in charge of technology diffusion policies, which derives legitimacy from alliances with governmental and non-governmental actors (representatives of professional communities). I also suggest modifying the model by imagining that the governor derives legitimacy from sanctions of legal regulation. After this modification, it is tempting to think about the authority relations as “disjoint” in Coleman’s sense of the word. But Coleman considers disjoint relations as voluntary, where

individuals are free to enter and leave a community at any point in time. This assumption, which is relevant for civic organisations (but not for states), will not be upheld here. The governor makes laws that become legitimate, because they give side-payments, which compensate the populations for losses of sovereignty and welfare.

When applied to analyses of EU legitimacy deriving from occupational groups, this framework must be adjusted to suit the Europeanisation of work organisations. Accordingly, there seems to be a connection between EU-legitimacy and authority relations within companies (the amount of cooperative capital). Cooperative capital contributes to an efficient delivery of policies on Community patents based on legal activism. The economic value of this capital can be seen as side-payments in exchange for sovereignty transferred to the EU. The EU derives legitimacy from sanctions of legal regulation of intellectual property, because legislative sovereignty gives welfare returns. By showing interest in building cooperative capital locally, Anne and her colleagues thus increase the efficiency of EU policies resulting in side-payments and output-based legitimisation. Yet, some conditions must be fulfilled. Increased legal activism by the EU requires a smooth adaptation of national traditions and institutions. In order to show that the side-payments compensate for the loss of democratic values (which accompanies this adaptation), the engineers must be able to reduce these values easily to a money equivalent (or any other obvious measure of the side-payments). Otherwise a legitimate representation with shared responsibilities between a national and a supra-national level of governance can be difficult to build.

To increase cooperative capital to an appropriate level, it may be necessary to give up some of the independent capital, and for the engineers, reductions of independent capital are reductions in wealth. Anne and Jacob illustrate institutional inertia due to difficulties in comparing the value of independent capital with side-payments for transfers of control to public regulation. Anne admits that learning about new technology organised by the public triggers side-payments: it reduces the private costs of learning. But the social relations that house the information exchange carry a meaning for Anne that affects her reliance on the knowledge she obtains. In her own words: “when you go to conferences, you learn during the lunch breaks”. Thus, Anne reveals that appeals to the state for technology counselling services can destroy independent capital. If these negative wealth effects cannot be measured according to the same standard as the side-payments, it is not obvious that increased government is worthwhile. Similarly, Jacob admits that increased government in his

field is beneficial to society. But he also admits that government will never compensate for the self-organised force of professional communities (independent capital), which are crucial for his ability to earn a proper income from his core competencies.

EU standardisation policies are to some extent different. The interpretation here is in the spirit of the indirect model of legitimisation. Peter reveals that future standards for road safety will be decided by the EU, leading to increased competition among national agencies with fees on transportation approvals. This can improve the budget of agencies and rewards for personnel, but it also implies increased identification with the interests of the bosses in a growing agency. This cooperative capital will make future delivery of EU policy in this area more efficient than at present. But the EU's standardisation policies are based on voluntary activity by national organisations (cf. section 4). Less judicial activism and more political attention probably increase the involvement of the national organisations in the EU's legislative process. Investments in cooperative and independent capital at the level of work places provide a solid foundation for this involvement. Different types of legitimisation can be discerned: firstly, the engineers can see that the side-payments (increased rewarding of personnel) derive from EU standardisation policy, which encourages output-based legitimisation; secondly, the legitimacy develops from the incorporation of the profession in EU policy making (according to the indirect model of legitimisation).

Improving the indirect model of legitimisation

The indirect model of legitimisation is inspiring, but it needs improvement. For a better understanding of EU legitimisation, a complementary aspect concerning side-payments in exchange for legislative sovereignty was added. The model is useful in the case of a weak European identity, but empirical evidence discussed in the following suggests that there are policy areas where this condition is not fulfilled. Even in the case of weak European identity, the model becomes awkward if activities of significant interest for one community are controlled by persons in other communities. The legitimising force of the involvement of the former community in the legislative process probably becomes weaker. This is the point that Anne acknowledges, saying that “entrepreneurial engineers” need public forums, where technological knowledge can be learned freely. However, “employee engineers” take actions to promote efficient patent regimes, which put limitations on technological issues left for discussions within these forums. Conversely, the value of patents for ideas and designs, which have already been exposed in a forum, is low. In this case, a

prerequisite for the legitimising force of the involvement of “entrepreneurial engineers” and “employee engineers” in EU governance seems to be that the two communities recognise each other’s right to control actions even if this has consequences across the communities.

Obviously, the social affiliations presented in this article are not acting independently. The following analysis of legitimate governance includes the notion of identity externalities discussed by Akerlof and Kranton (2000). This kind of externality occurs when persons refer to behavioural prescriptions of social affiliations and one person’s action has meaning and evokes responses in others. In the case of identity externalities, the legitimacy of a democratic ruler is favourable only if political institutions bring social norms for cooperation to the mind of persons, no matter to which group they belong. A crucial argument in this article is that the type of social norm that comes to mind depends on a person’s perception of political power. This perception varies with the person’s self-image as a member of a social group. The self-image in turn depends on identity externalities, which means that behavioural prescriptions of “entrepreneurial engineers” have a direct effect on how “employee engineers” perceive their political power. More specifically, in democracies, an engineer’s perception of political power depends on the prescriptions for political behaviour applied within different communities as well as the size of the communities. Whenever an engineer, who normally complies with the prescriptions of one social affiliation, begins to behave according to prescriptions of another affiliation, the relative sizes of the two groups will change, which affects the self-images of the engineers. Thus, “employee engineers” will not only lose cooperative capital if people within this affiliation begin to behave as “entrepreneurial engineers”, but they will feel that they also are losing power. The change in the relative sizes of the communities can increase the political apathy among “employee engineers”, while “entrepreneurial engineers” experience growing political power. When some resources in one community are controlled by a considerably larger community, engineers in the first community will respond in one way if they perceive the larger community as fair and democratic and in another way if the larger community is not considered as just.

One question that arises is how interdependencies between professional groups could influence EU legitimacy. Questionnaires were used to get a preliminary answer to this question. The interviewees were asked about their desire to transfer sovereignty within various policy areas to the EU. Their answers provide a hint of how they think about political institutions. I do not know of any studies

that show how interdependencies between professional communities (social market structures) influence this kind of thinking. The questionnaires only mention national states, which is to say that we are concerned with situations in which resources in one country are controlled from another country and identity externalities cut across countries. However, we can derive a general understanding of interdependencies between communities and consequences for the reliability of the indirect model of legitimisation. As it turns out, there seem to be forces reducing the importance of idiosyncratic identities in Europe, reducing the interdependency problem.

A questionnaire that refers to ten policy areas was used to examine interdependency. To start, the interviewee was asked to assign a value (from 1 to 5) to each area, indicating preferences for transferring the area to the EU. The interviewer then made a random selection of answers for each interviewee, which were arranged into four pairs. For each pair, the interviewee was asked to write down the reason for assessing a higher value to one of the policy areas in a pair. Finally, the author carefully read the reasons and the author's interpretations of the written answers are presented in Figure 1.

Figure 1: Meaning the interviewees impute to transfers of policy areas to the EU

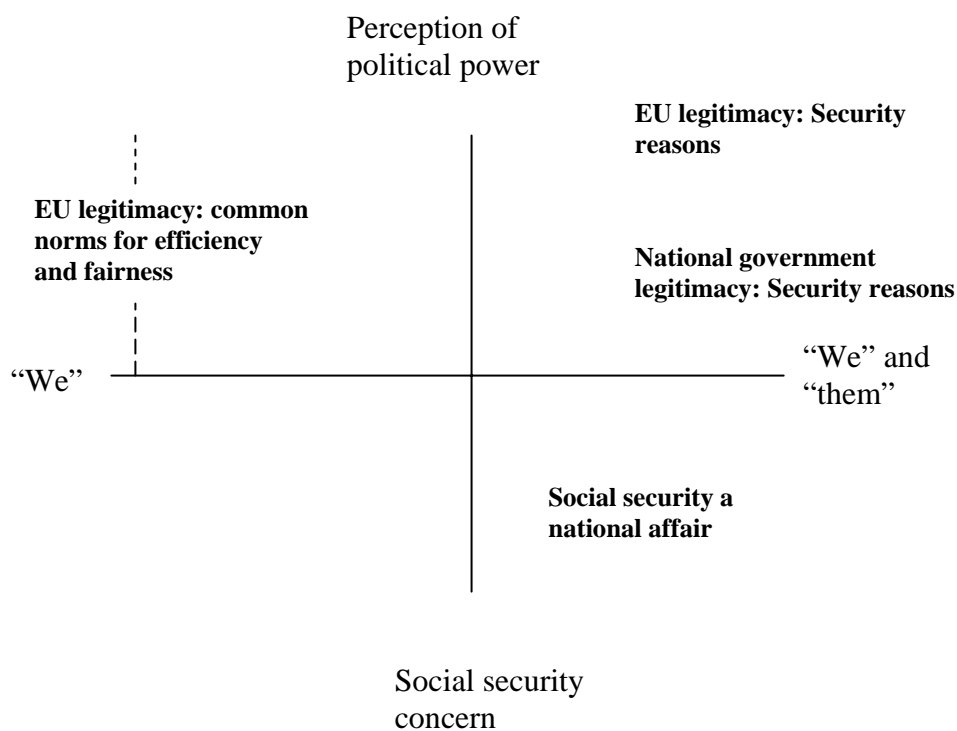


Figure 1 suggests that the indirect model based on the assumption about a weak European identity is incomplete. Responses to the questionnaire indicate areas where prescriptions for behaviour probably are motivated by a European identification (“We”). At the same time, there are three groups of policy areas that are associated with weak European identity (“We” and “them”). The first group seems to have a predisposition to the EU for “security reasons” (“EU legitimacy: Security reasons” in Figure 1). It covers identity externalities concerning the interviewees’ confidence in foreigners’ identity-related behaviour with regard to the protection of work places and natural resources. The answers to the questionnaire suggest that security depends on perception of power. The interviewees are not willing to accept that liability moves from the national to the EU level unless they perceive that they have power to influence the EU. As with the indirect model of legitimacy, the EU seems to require the legitimising force of national governments or non-governmental actors. In fact, low-identity cases, where this legitimising force is not needed, seem to be rare. It requires that citizens know about multiple identities and give “outsiders” the right to control actions even if they impact their own community. If the communities recognise each other’s right to control actions with consequences across the communities, it is reason to believe that higher-level rules that move political power between the two communities are legitimate. Without this recognition, and if the perceived power to influence the EU is insufficient, the need for security should be satisfied by the national government (“National government legitimacy: Security reasons” in Figure 1).

The identity of populations develops gradually within nations with national perspectives. The EU Commission mentions a hindrance to legitimacy – people cannot see that improvements come from European rather than from national decisions (2001 White Paper). Countervailing forces have been discussed in this article, such as the Europeanisation of work organisations. Engineers (entrepreneurial engineers, engineers employed as civil servants and in the private sector, university researchers) usually work in organisations that are affected by the European integration. They become involved in EU decision-making, their dependency on the EU’s internal market increases or they are otherwise affected by EU policies. Thus, places of work create clashes between identities, and differences may transform the national identity. New governance structures, which make the borders between European states fuzzy, are another countervailing force, including a growing number of cross-border regional collaborations (Gunnarsson 2003). The answers to the questionnaires confirm that idiosyncratic identities are disappearing in Europe. My tentative

conclusion is that the European populations share common prescriptions for behaviour within important policy areas. That is, the EU derives legitimacy from a European identification with norms for efficiency and fairness (“EU legitimacy: Common norms for efficiency and fairness” in Figure 1). It turns out that this is the most important group of policy areas in the figure. It includes policies for obtaining and protecting patents, public support of industrial research and regulation of mergers and acquisitions. These are efficiency-oriented policies that often are delivered by experts according to the economic model of legitimacy (see section 2).

My elaboration on the notion of the social structure of markets indicates an interesting symmetry between the European and the corporate levels. It reveals that the difference between the legitimisation of policy areas conditioned by European identification and the legitimisation of areas with low identity (idiosyncratic identities) also appears as a conflict between cooperative and independent capital (see the beginning of this section). The former type of capital increases in value with the importance of EU policies based on legal activism, which is helped by European norms for efficiency and fairness. In addition, some policy areas such as “protection of work places” lack a sharp borderline between areas conditioned by European norms and areas that for security reasons have a predisposition for the EU. Accordingly, there are border-line cases, where social encounters and power are crucial for some interviewees, whereas identity with European norms is important for others. For policy areas associated with European norms, perception of power is irrelevant for EU legitimacy (indicated by the broken line in Figure 1). Governance is imagined as arrangements for “institutional arguing” structured by legalisation, common rules for transparency and good arguments (cf. Nyer 2003).

The interviewees agree that the liability for social security should be left to the national government (“Social security a national affair” in Figure 1). A plausible explanation is that there are policy areas that are “irreducible national” (cf. Beetham & Lord 1998). We may imagine them as based on experience of care and nursing that is very personal. These areas are located on the “We” and “them”-axis in Figure 1, but below the axis, indicating that they are associated with identity with local communities based on ties of friendship; however, perception of power plays no role.

7 Conclusion

This article provides an analysis of EU legitimacy based on individual-level politics. Because the research question is examined using a case-study approach, possibilities for generalisations are limited. On the other hand, the explanation offered uses general methods and approaches that link satisfaction of individual interests with social structures in the civil society. This brings the indirect model of legitimisation and the EU's open methods for coordination to the fore. The findings presented in the article indicate that the conditions for the creation of a European identity are not good, because individual identities usually develop in national contexts with nationalistic perspectives. One strength of the research presented in this article is that it considers work organisations, which are exposed to Europeanisation and which may provide leverage for a European outlook. Alliances are sometimes established between these organisations and the authorities as part of problem-solving strategies at various levels of EU governance, for instance, when a single actor (foremost a public organisation) is unable to manage a problem by itself (Gunnarsson 2003). While generalising the indirect model, analyses in the article demonstrate methods suitable for analysing the effects of these alliances on the legitimacy. It relies on individual-level politics concerning matters that alter the power of engineers to influence economic compensation and to defend professional norms. The research questions are examined in the context of the regulation of intellectual property and standardisation policies. All in all, the material presented in the article provides grounds for drawing a few conclusions.

One lesson is that Danish engineers seem to have become aware of how Europe is governed through Europeanised work-relations. This is true irrespective of work as a civil servant, a researcher or as an engineer in a private company. Peter (civil servant) prepares technical standards for road safety in Europe. He realises that the European Single Market creates conflicts about public rules for disclosure of information about technical designs. A single market in Europe also plays transport agencies in different EU countries against one another. Allan (researcher) is in part funded by the EU. In addition, new university-industry partnerships imply that he must give EU policies on intellectual property and patents some thought. The commercialisation of university research implies that the work-relations of Allan and Anne (engineer in a private company) become more alike. For Anne, the Single Market accelerates the Europeanisation of the producer-customer relations, which simultaneously demands an efficient patent-regime in the EU. Jacob, on the other

hand, is employed by a local government and is unable to see any connections between the EU level and work-related topics, which may be explained by a weak tradition among Danish regions and local governments to involve themselves in European policy networks (Gunnarsson 2003).

Secondly, the findings presented in the article demonstrate a reliable story about how engineers, by building social capital within work organisations, help the legitimisation of the EU. The interview with Anne indicates how cooperative social capital, which derives from loyalties to the employer, satisfies her payment-interests. The building of cooperative capital uses interaction at the EU level as a reference point and, thus, becomes intertwined with the legitimisation of EU policies on patents. Yet, if the price in terms of damage to independent social capital, which serves the engineers' interest of professionalism, is too high, or the damage cannot easily be reduced to a monetary equivalent, the effect on EU legitimacy is likely to disappear.

This does not prove that the indirect model of EU legitimisation is suitable when the consequences of EU policies for one occupational group depend on actions taken by other groups. An alternative explanation points to the importance of identity externalities. The main result is a hypothesis for further investigation; within crucial policy areas, the populations in Europe share a European identification with norms for efficiency and fairness. If this hypothesis is true, the importance of the interdependency problem is reduced, the foundation of the indirect model of legitimacy is disturbed and it is probable that the role of experts in EU politics will increase.

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