Citation for published version:

Lees, C 2010, 'The Grand Coalition and the party system', *German Politics*, vol. 19, no. 3-4, pp. 312-331.
<https://doi.org/10.1080/09644008.2010.515773>

DOI:

[10.1080/09644008.2010.515773](https://doi.org/10.1080/09644008.2010.515773)

Publication date:

2010

Document Version

Peer reviewed version

[Link to publication](#)

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The Grand Coalition and the Party System

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ABSTRACT

The article examines the formation of the Grand coalition in the context of the German party system and draws upon a synthetic analytical framework derived from formal coalition theory. It argues that both the SPD and CDU/CSU would have anticipated that the Grand coalition would have generated relatively high levels of inter-party conflict as well as significant electoral costs. The article demonstrates that the CDU/CSU's motives for entering a Grand coalition were quite evident but those of the SPD were more questionable. The SPD's course of action is only explained by a number of specific policy objectives, a desire to minimise co-ordination costs, and through the concept of pure time preference, in which SPD elites demonstrated a preference for an established coalition model over new and untested coalition options. The article concludes that, whilst it is not possible to demonstrate that the Grand coalition increased the rate of party system fragmentation, it failed to stabilise the declining vote share for the two Volksparteien.

INTRODUCTION

This volume is premised on the notion of the 'Negotiators dilemma', common to all real-world coalition games, in which party elites must compete for scarce political goods and resources (such as policies, public office and votes) and are therefore presented with mixed incentives as to what balance to strike between consolidating and enhancing the collective

utility of a coalition and pursuing a more narrow instrumentalism in order to seek better deals within or without the existing coalition. In the context of UK politics, the current 'Con-Dem' coalition has not yet had to confront this dilemma in its starkest form but long experience from more established coalition arenas, such as those found in Germany, suggest that it is only a matter of time before it does.

Experience, of course, provides a template for future expectations and the German experience teaches us two clear lessons. First, as is discussed in the introduction to this volume, that inter-party conflict within orthodox 'one-plus-one' coalitions (involving one of the big Volksparteien as *formateur* and usually just one smaller party as junior partner) has been easier to manage than it has in Grand coalitions. This is because, in the former, the instrumentalism of the *formateur* is tempered by the desire to collaborate with the smaller party in the long term whereas, in the latter, the two Volksparteien remain fierce competitors from the start and openly seek the option to 'defect' to a one-plus-one coalition with a smaller surplus majority and more chance to determine the overall policy-orientation of the government. Given the downside risk of Grand coalitions, therefore, one can assume that party elites had strong and substantive reasons for entering into one in 2005. As the introduction to this volume argues, these included the desire of the SPD leadership to 'bind in' the party to the reformist path embarked upon under the previous Schröder governments, the absence of alternatives for the CDU/CSU, and also the desire of reformers from both parties to reduce transaction costs in tackling Germany's reform blockage¹. The first and third of these issues are dealt with in more depth elsewhere in the volume.

The second lesson, which is also touched upon in the introduction, is that Grand coalitions are subject to the risk of electoral attack from smaller parties, either because of voter unease at the prospect of Grand coalitions per se or because of the problems of coalition performance noted above, or simply because the centrist and rather technocratic nature of such coalitions opens up political space on the flanks of the party system². This is in addition to the fact that, although

incumbent governments in Germany have not traditionally been 'punished' by voters to the extent that they have elsewhere, government parties and junior coalition partners in particular have tended to suffer a net loss of vote share in the medium term³. This last point is of particular relevance to the strategic calculations of the SPD and is examined later in the article.

Thus, the lessons of the past did not bode well for the Grand coalition and, as we shall see, raise questions about why the two Volksparteien chose to enter into such a coalition after the 2005 federal election. In particular, they cast some doubt about the motives of the SPD for making such a choice. This article does not attempt to provide answers to these questions but, in assessing the Grand coalition in the context of the German party system, it does problematise some of the issues that underpin them. In doing so it will become apparent that, looking through the lens of coalition theory, the superior payoffs - be they office-seeking or policy-oriented - accruing to the SPD in choosing the Grand coalition option over alternative coalition options are not immediately apparent. Moreover, it argues that in terms of vote-seeking, the SPD's decision appears to have been a major strategic mistake.

The rest of the article is structured as follows. First, I present a synthetic framework for explaining coalition formation, derived from the established literature and in a manner appropriate to the institutional context of German party politics. Second, I flesh out that institutional context, with an emphasis upon the conditions in which the 2005 coalition game was played, with an emphasis upon the falling electoral support for the two Volksparteien and the subsequent decline in their integrative roles. The section will highlight why, in both instrumental and normative terms, the logic of the Grand coalition option was questionable. Third, I then use the synthetic framework to try to explain some of the issues that underpinned the process of coalition formation in 2005 and to try to establish why the Grand coalition option was chosen. Fourth, I then assess the impact of the grand coalition on the German party system. Finally, the article concludes with a brief summary and discussion of the data and arguments.

EXPLAINING COALITION FORMATION IN GERMANY

For students of coalition behaviour, the formation of what appear to be surplus majority coalitions highlights a key analytical question: what is the trade-off between office-seeking and policy-seeking payoffs? For students of coalition behaviour *in Germany*, the nature of this trade off is a particularly thorny issue; not just because of the relative size of the surplus majority that is normally associated with Grand coalitions but also because of the highly constrained strategic environment in which German political parties operate. These constraints are the product of the historical development of the Federal Republic and the 'logic of appropriateness'⁴ that is associated with it, including parties' own conception of their role as part of the post-1949 *Parteienstaat*. This is discussed at greater length in the next section of the article. However, these constraints also manifest themselves in a more contingent fashion, through the shaping of party programs and also in terms of the self-constraints that political parties impose on themselves through the pre-election statements ruling out particular coalition arrangements even before any votes have been counted⁵. Such 'semi-institutional' factors are not limited to Germany and similar constraints can be found in other polities⁶. Nevertheless, for the purposes of this article, in Germany office-seeking models of coalition behaviour must be strongly modified by the role of ideology, norms and beliefs.

Studies of the process of coalition maintenance lend themselves to the kind of in-depth analysis of the distribution of policy portfolios and policy content of coalition agreements that soften the edges of the office-seeking/policy-seeking dilemma. However, the balancing of these two types of payoffs is far more contested in the theoretical work on coalition *formation*, upon which most of the early coalition literature was focused and where game-theoretical models quickly gained the ascendancy. These game-theoretical

accounts are highly formalised and, although they are in fact often rival or even contradictory theories, they make explicit certain common assumptions about the 'rational actor' nature of political parties and the 'constant sum' and 'zero-sum' nature of the coalition games they played. Much of the theoretical modelling of coalition games is of limited utility in explaining real-world coalition formation but the best of it still has a profound analytical power and elegance of abstraction that allows us to highlight key empirical issues.

For instance, Riker's⁷ prediction that players will try to create coalitions that are only as large as they believe will ensure winning and that repeated plays of the coalition game will produce a 'minimum winning' coalition of 50 per cent plus one vote fails to predict outcomes, particularly in the context of 'strong' party systems such as those found at the national and sub-national levels in Germany. By contrast, von Neumann and Morgenstern's⁸ notion of the 'minimal winner' - bigger than the minimum winner but nevertheless the smallest feasible majority given the rules of the game – is better supported empirically⁹. What is important is that, in applying either model to real-world politics, we must account for the 'irrationality' of the persistence of strong and normally indivisible parties in pure office-seeking coalition games. The constraining effects of party organisations are returned to later in this article.

Moving on to inter-party relations, Gamson's¹⁰ assumption that, all things being equal, parties will favour the 'cheapest winning' coalition', in which they are the larger partner in a coalition, is a useful discriminator when considering coalition options that appear to have no clear *formateur*. This is also true of Leiserson's¹¹ 'bargaining proposition', which argues that players will favour coalitions with the smallest number of partners within them. But Leiserson's model is also a good discriminator between coalition options when

any potential formateur is otherwise indifferent to a number of coalition options or where empirically it is difficult to infer variance in their utility. As will become apparent later in this article, Leiserson's focus on the collective action problems associated with coalition formation also re-enforces two other points. First, it supports the argument that the more fluid coalition environment unleashed by party system change over the last thirty years has been to the benefit of the two Volksparteien, despite the decline in their overall share of the vote. Second, it further stresses the constraints imposed upon the coalition game by party organisations.

Leiserson's assumptions, along with those of Riker, Von Neumann and Morgenstern, and Gamson, all cast light on the office-seeking dimension of the coalition game. But what of the policy dimension? An early attempt to combine office-seeking and policy-oriented payoffs in a formal model that still possesses significant analytical value was developed almost forty years ago by de Swaan¹², building on the work of Axelrod¹³. De Swaan's model incorporates office-seeking and policy-orientation into a single uni-dimensional calculus. Office-seeking remains the central strategic goal in the coalition game but the members of the successful coalition will ideally be adjacent to one another along a single Downsian Left-Right ideological dimension: i.e. a 'minimal connected winning' (MCW) coalition. De Swaan's model improves on Axelrod's earlier work by introducing the notion of ideological distance as well as adjacency as a formation criterion. As a result, political parties are assumed to not just prefer MCWs but also MCWs with the smallest ideological range within Euclidian space. The model's focus on the median legislator comes from the fact that De Swaan assumes that the political party that controls the median legislator is decisive in the coalition game because it is the player that blocks the axis along which any majority connected winning coalition must form. Where a majority coalition is normally required as in Germany, the

party that controls the median legislator (the so-called Mparty) within the legislature must be included in the winning coalition. Under the same conditions, if a party also controls the median legislator within the coalition (the MpartyK) it is assumed to be decisive in determining the coalition's potential composition, program, and stability.

De Swaan's model has, of course, been criticised; not least because of its focus on a single Downsian left-right dimension. The crux of this criticism is that a single dimension of contestation like the one posited by de Swaan does not reflect the true dimensionality of real-world politics, particularly the patterns of party political competition found in Western European polities¹⁴. As a result, there has subsequently been a great deal of scholarship that models multi-dimensional policy spaces through the use of 'core theory'¹⁵ and the calculation of dimension-by-dimension medians¹⁶ or DDMs. The former approach focuses on the relative positions of political parties at the start of the coalition game¹⁷, whilst the latter concentrates on the later stages of the coalition formation process and, in particular, involves a degree of retrodution about the motives of players from the allocation of policy portfolios¹⁸. These approaches seek to identify the 'political heart'¹⁹ or 'latticing'²⁰ of players' preference curves in n dimensional policy space. More recently, there have also been attempts²¹ to operationalise the highly influential formal model put forward by Sened²², drawing upon associated work by Crombez²³ and Baron and Diermeir²⁴. Sened's model is arguably one of the most concerted attempts to date to model a utility function that (1) contains both an office- and policy-seeking component; (2) allows variance in the weighting of the two components between political parties; (3) does not collapse the two components into one dimension; and (4) allows for and predicts the formation of minority governments. However, as even the most successful applications acknowledge, this strand of research is still at an early stage of development and datasets are incomplete²⁵.

Although they are all important studies, this article does not draw directly upon the insights of the multi-dimensional scholarship described above. The reasons for this are both theoretical and empirical. In terms of theory, the disequilibrating impact of adding additional dimensionality introduces a whole new set of debates that are beyond the scope of a descriptive analysis such as this²⁶ and have no practical value to it. More importantly, one cannot avoid two key empirical objections to these models, be they 'thin' and parsimonious or 'thick' and contextualised. First, if we consider the initial post-election stage of the coalition game, where party weights are first revealed and players' strategic objectives are revised in the light of them, it is hard to support the assumption embedded in these models that politicians are cognitively capable²⁷ of making the sort of multi-dimensional calculus envisaged by them or, indeed, willing to absorb the kind of deliberation costs that such calculations would require within complex organisations²⁸ such as political parties. This is also, in a roundabout fashion, an echo of the point about collective action problems put forward by Leiserson. Second, although the DDM approach does cast valuable analytical light on the division of portfolios at the mature stage of the process of coalition formation, this tells us more about the relative success of the political parties within the coalition negotiation process, rather than about with whom political parties decide to negotiate in the first place. Well-established theoretical and empirical studies of complex organisations reveal that the process of formal negotiations not only increases levels of trust and information but also results in delegation from the very top of the organisation to meso-level working groups²⁹. This means that it is questionable whether one can deduce the full potential power of parties at *T1* (immediately after the election) from outcomes at *T3* (the signing of the formal coalition agreement) as the parameters of the coalition game at *T2* (the start of formal coalition negotiations) change profoundly once

one or more parties become, as it were, 'preferred bidders'. Thus, whilst DDM models are strongly explanatory, they and other 'pure' policy-oriented models are less effective in predicting real-world coalition outcomes³⁰.

As a result of these theoretical and empirical objections, this study uses a fairly straightforward synthesis of existing models to examine the formation of the Grand Coalition in 2005 and its context within, and impact upon, the German party system. It assumes the following:

- First, coalition formation is subject to clear numerical formation criteria, based upon von Neumann and Morgenstern's notion of the 'minimal winner' and Leiserson's bargaining proposition.
- Second, these numerical formation criteria are modified through the recognition of ideological adjacency and de Swaan's notion of the MCW with the smallest ideological range. Therefore the location of the Mparty and MpartyK is of significance.
- Third, coalition players are not capable of complex multi-dimensional calculations at *T1* and that therefore the location of the Mparty/MpartyK along the Downsian left-right dimension remains the best predictor of coalition outcomes³¹.
- Fourth, the dominant left-right dimension is cross-cut by a libertarian-authoritarian dimension³² with limited predictive power but significant explanatory value when assessing government declarations and portfolio allocations.

- Fifth, the trade-off between office-seeking and policy-oriented payoffs is complex and will vary across time, space, and – after Sened – the preferences of individual political parties.
- Sixth, all strategic decisions are subject to ‘pure time preference’. This means that players will place a premium on payoffs accruing nearer in time and discount those that are more remote in time. There are debates about the size of the discount rate³³ and even the ethics of setting one in the first place³⁴ that are beyond the scope of this study. However, unless we assume that players are indifferent to time, we must assume that some degree of time discounting takes place. Thus, in the broadest terms, this analysis is based upon the assumptions that *ceteris paribus* (1) office-seeking payoffs have more immediate utility and will be weighted by players accordingly; (2) that policy-oriented payoffs as a whole are therefore discounted but that more weight will be placed upon those policies that bring more immediate utility (‘low hanging fruit’ such as tax cuts or rises and other forms of headline-grabbing legislation) compared with those that require longer-term utility flows or more immediate costs (such as sustained long term investment or reforms with long timelines); and (3) parties will prefer coalition arrangements that have been tried-and-tested, preferably at the national level but also over time at the at either the sub-national level, rather than have to price in the opportunity costs of new coalition arrangements³⁵.

This last point about players’ preference for established coalition models over new and untested options is particularly relevant to our understanding of why the SPD and CDU/CSU chose a Grand coalition over other feasible options. The Grand coalition option was, as we

have discussed, not without its own risks but it nevertheless represented the orthodox coalition option. Moreover, the dynamics of discounting untested coalition options was also buttressed by the two parties' common understandings of their roles as integrative forces within the German party system. Yet, as the next section of this article makes clear, one of the reasons why the two Volksparteien had to make such a choice between tested and untested coalition options was because of their falling electoral support and declining integrative power.

ESTABLISHING THE CONTEXT: FALLING ELECTORAL SUPPORT AND THE DECLINING INTEGRATIVE ROLE OF THE VOLKSPARTEIEN

At the start of our timeline, the 1976 federal election, the CDU/CSU and SPD polled a combined share of 91.2 per cent of the vote. And, although this level was never achieved again, for more than a decade afterwards the two parties continued to enjoy percentage-levels of support in the mid-to high-80s. Electoral support on this scale allowed the two Volksparteien to continue to regard themselves as the key integrative forces within the German party system.

Political parties are not just instrumental actors and their normative function is recognized in scholars' categorization of parties as, for instance, 'parties of social integration'³⁶ or 'parties in the electorate'³⁷. Thus, beyond purely vote seeking, office seeking, and policy seeking³⁸, political parties also act as agents of elite recruitment (putting forward candidates for public office), sustaining public institutions (providing personnel; providing leaders with logistical support/effective opposition), interest representation and aggregation (converting the demands of social interests into manageable packages of public policy choices), and mobilization and integration (integrating citizens into the political

system and mobilizing civic participation³⁹. These latter functions of political parties were central to the Volkspartei model in the Federal Republic after 1949. The Volksparteien conform to Kirchheimer's⁴⁰ classic typology of the Catch-all party, as defined by organizational and programmatic characteristics⁴¹ but with a particularly strong emphasis on the parties' integrative role. The reasons for this lie in German history. In Imperial and Weimar Germany, a strong strand of conservative German political thought considered political parties to be agents of social division and it was only after the fall of the Third Reich that a consensus emerged in which political parties came to be regarded as crucial conduits for participation and the development of other-regarding values and behaviour. In particular, it was recognized that, in a new democratic order that had effectively been imposed upon a defeated and compliant populace, political parties could perform a disciplinary role in educating the general public about societal interests and individual members of society about the limits of personal preferences⁴².

As a result of this emerging consensus, the traditional notion of the Beamtenstaat or 'Administrator State' that had characterized earlier narratives of the German state was augmented with the new notion of the Party State. This principle was codified in Article 21 of the Basic Law of the new Federal Republic, which stated that 'political parties shall participate in the formation of the political will of the people'. The growing inter-dependence of state and political parties was such that, by the 1970s, the main political parties staffed more than 50 per cent of all senior civil service posts (state secretaries, heads and departmental heads of division) at the state and federal levels⁴³.

Article 21 constructed a new norm of state power in Germany in which state legitimacy was directly linked to the legitimacy of the political parties (and vice versa). And inevitably, the privileged position that the two Volksparteien enjoyed in the new Federal

Republic resulted in a feedback effect in which the construction of the parties' own ideological profile over time was shaped by the technocratic discourse of the civil service. This process was particularly marked in the SPD, where what had been a Marxist-informed discourse of evolutionary social transformation was moderated into one of technocratic welfarism, especially in those states, such as North Rhine-Westphalia and Berlin, where the Social Democrats were often the governing party⁴⁴. As long as the Volksparteien continued to call upon the levels of support it enjoyed between the 1960s and 1980s, the conflation of political and system support was sustainable. However, as Wiesendahl⁴⁵ observed, this cosy consensus was in fact a 'modernization trap' in which the logic of the Volkspartei blurred party identities and alienated those supporters still attached to more heroic political visions of the right or the left. Disaffection was accelerated by the nature of the established parties' organizational structures, which were complex, bureaucratic and hostile to new groups or new ideas. Over time, the sense of malaise seeped into the political mainstream and ordinary voters also began to resent the monopoly of power enjoyed by an insulated, self-selecting political class; a world of 'cliques, cabals, and careers'⁴⁶. By the late 1980s the Volksparteien were no longer seen as the integrating force that they had been in the past⁴⁷ and, inevitably, this disaffection imposed a further constraint upon their claims to formulate the political will of the people.

Figure One about here

This malaise was reflected in a slow decline in the share of the combined vote for the Volksparteien. Figure One charts the falling percentage share of second votes for the two Volksparteien in German federal elections over the period 1976-2005. The 1976 figure is the high point of a period of settled triangular party dynamics associated with the Pappi model⁴⁸. The Pappi model presented a fairly undemanding strategic environment for the

two Volksparteien. The two parties were able to place themselves at the centre of a comfortable narrative in which high levels of popular support reflected similarly high levels of system legitimacy and voter satisfaction that were one of the fruits of the West German economic miracle; a miracle of which the CDU/CSU in particular could consider itself the architect.

This record of success ruled out the kind of neo-Liberal 'change narrative' that at that time was gaining purchase in less successful states such as the United Kingdom and was therefore reflected in the limited dimensionality of inter-party conflict and co-operation in the Pappi model. There was little room nor, it was felt, need for major conflicts around issues of political economy or defence and, instead, the period was characterised by co-operation along three issue dimensions: (1) 'bourgeois issues' such as economic growth and prosperity; (2) the 'social-liberal' dimension of individual and collective rights; and (3) the 'corporatist' dimension, based on consensual policy making and the co-option of the social partners. This last dimension formed the basis of potential co-operation between the two Volksparteien but the default coalition mode was, as discussed, the one-plus-one model, with one of the two Volksparteien in coalition with the FDP, which acted as the 'kingmaker' or pivot party within the system.

The Pappi model appeared stable at the time and attracted much admiration⁴⁹. In retrospect, however, the stability of the Pappi model was a temporary phenomenon and, as Figure One demonstrates, from the early 1990s onwards, there was a slow slippage in the overall share of the Volkspartei vote. This decline began modestly but in the 2005 federal election the two parties' vote share fell to 69.4 per cent.

As Figure One demonstrates, the trend of decline has been particularly marked for the SPD. With the exception of the 1998 federal election, in which the SPD's 40.9 per cent

share of the vote exceeded that of the CDU/CSU's 35.1 per cent, the SPD has been the weaker electoral force throughout the period since 1976. Of course we now know that worse was yet to come in the 2009 federal election for both Volksparteien, when their overall vote share fell to 56.8 per cent, and for the SPD in particular, polling just 23 per cent.

As a result, with the benefit of hindsight it is now accepted that neither party benefited electorally from participation in the Grand Coalition. This is explored in more depth later in the article. It was an arrangement that magnified the very technocratic and rent-seeking tendencies that had increasingly alienated voters from the late 1980s onwards⁵⁰. So what was the logic through which this second, ill-starred Grand Coalition at the federal level came about?

EXPLAINING THE FORMATION OF THE GRAND COALITION

The results of the 2005 federal election represented the continuation of the process of de-concentration within the German party system that had been ongoing since 1976. Figure Two demonstrates the structural impact of this process in terms of the increasing number of mathematically feasible minimal winning coalitions and coalitions with swing following German federal elections over the period 1976 to 2005. As already discussed, minimal winning coalitions are normally not the very smallest minimum-winning coalitions of 50 per cent plus one vote but are rather the smallest feasible coalitions, given the constraints placed upon the coalition game by party discipline and the constitutional requirements placed upon party groups within the Bundestag.

Thus, within the real-world constraints of German politics and in the absence of individual defections from one party to another, minimal winning coalitions are subject to 'swing'⁵¹ when both parties in a two-party coalition or at least one party in a multi-party

coalition are able to transform a winning coalition into a losing coalition by its defection from a coalition (or vice-versa)⁵². At the same time, however, not all feasible coalitions are minimal winners and it is often the case that that these are subject to swing as well. Thus, it follows that under conditions of increasing party system fragmentation we would expect three things to happen. First, we would expect the number of potential minimal winning coalitions and coalitions with swing to increase. Second, we would expect that the number of coalitions with swing will be at least as great as the number of minimal winning coalitions. Third, that because the potential number of winning coalitions rises exponentially as players are added⁵³ the entry of new political parties into the coalition game will mean that the number of coalitions with swing will increasingly exceed the number of minimal winning coalitions.

Figure Two about here

Figure Two conforms to our expectations. At the start of our time line, the triangular Pappi model is firmly in place until the arrival of the Greens in 1983 increased the number of minimal winning coalitions to four and the number of coalitions with swing to seven. German unification and the emergence of the PDS (now the Left Party) further fragmented the German party system, with the 1990 federal election producing a distribution of party weights capable of generating four minimal winning coalitions and 14 coalitions with swing. The 2002 federal election produced a distribution of party weights that reduced the number of minimal winning coalitions and coalitions with swing but the 2005 federal election produced a distribution that once again increased the number of minimal winning coalitions to seven, although the number of coalitions with swing remained steady at 12. This distribution of party weights had two important consequences. First, unlike under the Pappi model when the FDP enjoyed kingmaker status, no single small party could be kingmaker

across all seven minimal winning coalitions. Second, in addition to the minimal winning coalitions there were also five mathematically-feasible surplus majority coalitions that also involved a party that enjoyed swing. And because they were surplus majority coalitions it followed that if there was a single party with the power of defection that could not be one of the smaller parties but instead had to be one of the two Volksparteien⁵⁴. Taken in the round, therefore, despite the overall decline in the Volkspartei vote the outcome of this process of party system change represented a shift in coalition power away from the small parties and the FDP in particular and towards the CDU/CSU and SPD.

Table One about here

Of course, as already discussed, the process of coalition formation in real-world party systems is constrained by party ideology, as well as broader norms and beliefs. This is where our synthesis of coalition models can sharpen the analysis. In Table One I set out the seat shares and real-world coalition outcomes following German federal elections over the period 1976 to 2005. Table One also interrogates the real-world outcomes in the light of the assumptions about structural attributes included in our theoretical framework: i.e. does the winning coalition include the largest party?; is it a minimal winner?; does it conform to the bargaining proposition?; what is the MCW?; if the MCW with the smallest ideological range, what is the Mparty and MpartyK on the Downsian left-right axis?. The table demonstrates that in seven out of nine instances, the winning coalition does include the largest party (the exceptions being after the 1976 and 1980 federal elections, when the CDU/CSU was the largest party but was not included in the coalition). However, only three out of nine real-world outcomes (1976, 1980, and 1994) are in the strictest sense minimal winners, with the rest involving some sort of surplus majority. If we apply the bargaining proposition in the context of a strict minimal winning requirement it is supported in seven out of nine

instances (the exceptions are after the 1987 and 2002 elections), although if it is relaxed it is supported in all nine instances. The MCW assumption is supported in seven out of nine instances (the exceptions being 1983 and 2005). However, if we apply the assumption that the 1987 coalition outcome (a continuation of the CDU/CSU-FDP coalition) is the MCW with the smallest ideological range, then this leaves the coalition outcome following the 2005 federal election as the apparent anomaly (I return to this discussion below). Finally, if we assume that all MCWs with the smallest ideological range in the table are the correct estimates, it is apparent that the FDP lost its Mparty status to the SPD following the 1998 federal election and has not recovered it. Moreover, whereas the FDP was never MpartyK, the SPD was both Mparty and potentially MpartyK following the 1998, 2002, and 2005 federal elections.

In the light of the data and arguments presented through Figure Two and Table One, the logic of the decision of the SPD to enter a Grand coalition is at least questionable. Figure Two demonstrates that the distribution of party weights following the 2005 federal election generated seven minimal winning coalitions and 12 coalitions with swing. Obviously, many of these minimal winning options were unfeasible but, if we assume that political parties want to join MCWs, the SPD had clear advantage over its rival Volkspartei. Unlike the CDU/CSU, which failed to secure enough seats to make possible its preferred option of a Black-Yellow coalition and lacked any plausible alternatives, the SPD was not compelled by legislative mathematics or even simple ideological adjacency to enter a Grand coalition. The smallest potential minimal winner was a Red-Red-Green coalition (with the PDS/Left Party and the Greens), which would have had 327 seats, giving it a governing majority of 19. Moreover Red-Red-Green was also the smallest MCW and, if it had formed, the SPD – which was still Mparty within the Bundestag - would have retained its status as MpartyK. By

contrast, the decision to enter a Grand Coalition meant that the SPD abdicated its status as MpartyK to the CDU/CSU, with all the implications that held for maintaining leverage over the direction of policy formulation and legislative management over the course of the life of the coalition. On the other hand, given the ideological distance that was still very evident between the SPD and PDS/Left Party in 2005, it is fair to argue that the Grand coalition option was in fact the MCW with the smallest ideological range. In addition it does fulfil the bargaining proposition, in that it is the only majority coalition option with only two players and thus would be expected to suffer less from collective action problems than other coalition options. The collective action problem can also be analysed in terms of our pure time preference assumption. As is discussed in the introduction and elsewhere in this volume, it can be argued that Germany is ruled by a permanent 'unofficial' Grand coalition anyway and it is a coalition model that has been tried-and-tested elsewhere, not least at the federal level between 1966 and 1969. By contrast, even if we discount the animosity that existed between the SPD and Left Party in particular and also assume that the Greens would have been willing to take part in such a coalition arrangement, at *T1* a Red-Red-Green coalition would have appeared to many within the SPD as an untried option in which the downside risk was obvious whilst the long-term benefits, although potentially substantial, were not immediately apparent. In short, for the SPD leadership the Grand coalition option was, in more ways than one, the conservative choice.

The consequences of that choice are analysed elsewhere in this volume and it is up to the reader to make her judgement as to whether it was the right one. However, in as far as we might expect the Grand coalition to restore the flagging fortunes of the two Volksparteien and perhaps reverse the long-term decline discussed earlier in this article, it was clearly the wrong choice – as the next section demonstrates.

THE IMPACT OF THE GRAND COALITION ON THE GERMAN PARTY SYSTEM

After entering office, the Grand coalition enjoyed a honeymoon in the opinion polls. The two parties entered government with similar levels of support and throughout the autumn of 2005 this remained the case, with the CDU/CSU enjoying ratings of 37 per cent and the SPD polling a quite respectable 35 per cent. However, from early 2006 onwards the fortunes of the coalition began to deteriorate, and the SPD in particular began to suffer a slow haemorrhage of support throughout the life of the coalition.

Figure Three about here

This decline is demonstrated in Figure Three, which sets out opinion poll ratings for the political parties and/or parliamentary factions over the period September 2005 to July 2009. The figure demonstrates that, by April 2006, the SPD's support had dropped to 31 per cent, whilst the CDU/CSU was still polling 42 per cent. From then on support for the two Volksparteien as expressed in opinion polls fluctuated but, in the months preceding the 2009 federal election the SPD's performance deteriorated further with the party polling just 25 per cent in June and July 2009, compared to 37 and 36 per cent for the CDU/CSU. Over the entire period since the 2005 federal election, the CDU/CSU's mean support was 38.4 per cent, compared with 29.4 per cent for the SPD.

A detailed analysis of why the SPD's support in particular dropped so dramatically is beyond the scope of this paper. However, it is worth noting that the end of the Schröder era had profound consequences for the centre-left in Germany. These consequences were threefold. First, the SPD found it exceptionally hard to move on, leading to an internal leadership vacuum and three changes of leader between 2005 and 2009. Second, it encouraged the emergence and consolidation of a more potent competitor on the SPD's left

flank, in the shape of the new Left Party, working explicitly to mobilise those individuals within the electorate who might have previously considered themselves natural SPD voters but felt disenfranchised by Schröder's Hartz IV supply-side reforms. Thus, over the period from 2005, the Left Party enjoyed a mean poll rating of just over nine per cent. Third, it cast a long shadow over the Greens. Despite four years in opposition, the Greens continued to grapple with the consequences of decisions taken by the Schröder government that polluted the Greens' brand as a pacifist, emancipatory, party and alienated much of their core support. As a result, the Greens were the least well supported party in opinion polls between 2005 and 2009, with a mean support of just under nine per cent, although in the months preceding the 2009 federal election, this support rose somewhat to around 11 per cent.

Figure Four about here

All three factors noted above had an impact upon the dynamics of party competition but the key development was undoubtedly the remarkable rise in support for the FDP in the run-up to the 2009 federal election. The party enjoyed a mean poll rating of just under ten per cent over the period from 2005 to 2009, making it the most popular of the small parties, but of particular note was its poll performance throughout 2009, in which it consistently polled between 13 and 15 per cent. This had a profound effect on the possible coalition options that became feasible in the run-up to the 2009 federal election. Figure Four sets out the opinion poll ratings for German political parties ordered by potential coalition outcomes over the period September 2005 to July 2009⁵⁵. In real-world politics at the federal level there are a total of nine possible coalition options: the Grand Coalition; Black-Yellow; Black-Green; Jamaica; Red-Green; Social-Liberal; Red-Red; Red-Red-Green; and Traffic Light. However, by the summer of 2009, a number of self-restrictions imposed by political parties

had reduced this to six politically feasible coalition options: the Grand Coalition; Black-Yellow; Black-Green; 'Jamaica'; Red-Green; and Red-Red-Green. Three other plausible coalition options - Social-Liberal⁵⁶; Red-Red and 'Traffic Light' – had therefore been excluded in the context of the 2009 federal election. Nevertheless, one can see no *a priori* justification for excluding these options so they are included in the figure.

At the start of the period, the ruling Grand Coalition was overwhelmingly the most 'popular' combination, with support for the two Volksparteien close to that enjoyed at the 2005 federal election and, over the entire period, the two parties enjoy a mean combined support of 67.8 per cent. However, what is clear from the figure is that other coalition options became potentially possible, given the right distribution of party weights when the polls closed on the evening of 27 September 2009. Over the period from 2005 to 2009, the next most popular coalition option was Jamaica, with a mean of 57 per cent, followed by Black-Yellow (a mean of 48.2 per cent), then Traffic-Light (48.1 per cent), Black-Green and Red-Red-Green (47.3 per cent), Social-Liberal (39.1 per cent), Red-Red (38.5 per cent), and finally, Red-Green (38.2 per cent). In the months preceding the 2009 federal election, the Grand coalition option remained the most popular, at around 61 per cent, closely followed by Jamaica at around 60 per cent, and Black-Yellow and Traffic Light at around 49 per cent. In addition the Red-Red-Green option – rejected by the SPD in 2005 – was also feasible at around 45 per cent.

Figure Five about here

Taken in the round, the eventual results of the 2009 election confirmed the ongoing trend towards system fragmentation that was suggested by the polling results. Figure Five presents Herfindal-Hirschman Indices, indicating levels of party system cohesion/fragmentation in the German federal party system over the period 1976 to 2009.

As the figure demonstrates, there has been a long-term trend of decline in party system concentration across the timeline but that most of that decline has taken place during two distinct periods. The first period spans the four elections between 1976 and 1987 and was marked by the emergence of the Greens in the early 1980s. During this time, the Herfindal-Hirschman Index declined from 0.4324 in 1976 to 0.3571 in 1987. Interestingly, the impact of unification and the emergence of the PDS did not result in further fragmentation and the indices for the five elections between 1987 and 2002 hover around the overall mean of 0.3564. However, the three elections since 2002 have seen a second sustained period of fragmentation, with the index falling from 0.3568 in 2002 to 0.2907 in 2005 and finally 0.2520 in 2009. The drop between 2005 and 2009 is in line with the trend line since 2002 so in that sense, the Grand Coalition did not have a profound systemic impact. However, combined with the ongoing decline in the vote share for the two Volksparteien, the decision to form a Grand coalition cannot be regarded as having fulfilled the objective of stabilising and consolidating their positions within the party system. And given the electoral debacle suffered by the SPD in 2009, the party's decision four years earlier to enter into the Grand coalition rather than explore alternative coalition options looks in hindsight to have been a major strategic mistake.

CONCLUSIONS

As discussed at the start of this article, the Negotiators dilemma is common to all real-world coalition games but Grand coalitions throw this dilemma into particularly sharp relief. Thus, even prior to the formation of the coalition in 2005, we would have expected (1) relatively high levels of inter-party conflict; and (2) significant electoral costs to be attached to this coalition arrangement. The article demonstrates that, although the CDU/CSU's motives for

entering a Grand coalition are clear (given the lack of alternative minimal winning coalitions open to it), the SPD's decision to enter a surplus majority coalition as a junior partner when it enjoyed both Mparty and potential MpartyK status is more questionable. The SPD's course of action is only explained by (1) reference to the specific policy objectives touched upon in the introduction to this article; (2) a desire, consistent with Leiserson's bargaining proposition, to avoid the increased co-ordination costs that would have come with a multi-party coalition; and (3) pure time preference, in which SPD elites demonstrated a preference for the established Grand coalition model over a new and untested Red-Red-Green option. It was clear that the Grand coalition option carried a number of risks but, to borrow the language of Donald Rumsfeld, these risks were 'known knowns' rather than the 'known unknowns' of Red-Red-Green.

Of course, the impact of pure time preference is that decisions taken in relative haste can be repented at leisure. This is true for both Volksparteien and certainly the case for the SPD. As the article argues, the Grand coalition magnified the very technocratic and rent-seeking tendencies that had alienated voters and failed to consolidate the position of either party within the federal party system. Moreover, for the SPD the Grand coalition ended in an historic electoral disaster in the 2009 federal election. Overall, the impact of the Grand coalition on the party system as whole is unclear. The continued fragmentation of the German between the 2005 and 2009 federal elections is in line with that which took place between 2002 and 2005. But this is a counter-factual argument and it is hard to say what might have happened if the SPD had chosen another course of action in 2005. What is clear, however, is that the decision not to take seriously any alternative coalition options led to four wasted years in which the major strategic dilemma that still faces the party – how to

neutralise or accommodate the troublesome electoral competitor to its left – remains unresolved.

FIGURE ONE. PERCENTAGE SHARE OF SECOND VOTE FOR THE VOLKSPARTEIEN IN GERMAN FEDERAL ELECTIONS, 1976-2005

Source: <http://www.wahlrecht.de>

FIGURE TWO. NUMBER OF MINIMAL WINNING COALITIONS AND COALITIONS WITH SWING FOLLOWING GERMAN FEDERAL ELECTIONS, 1976-2005

Source: <http://www.wahlrecht.de>

TABLE ONE. COALITION OUTCOMES FOLLOWING GERMAN FEDERAL ELECTIONS, 1976-2005

Election:	03/10/76	05/10/80	06/03/83	25/01/87	02/12/90	16/10/94	27/09/98	22/09/02	18/09/05
<i>Seats in Bundestag</i>									
<u>CDU/CSU</u>	243	226	244	223	319	294	245	248	226
<u>SPD</u>	214	218	193	186	239	252	298	251	222
<u>FDP</u>	39	53	34	46	79	47	44	47	61
<u>Greens</u>	---	---	27	42	8	49	47	55	51
<u>PDS/Left Party</u>	---	---	---	---	17	30	35	02	54
<u>Total Seats</u>	496	497	498	497	662	672	669	603	614
<u>Decision rule</u>	249	249	250	249	332	337	335	302	308
<u>Coalition</u>	SPD-FDP	SPD-FDP	CDU/CSU-FDP	CDU/CSU-FDP	CDU/CSU-FDP	CDU/CSU-FDP	SPD-Greens	SPD-Greens	CDU/CSU-SPD
<u>Change</u>	None	None	None	None	None	None	Total	None	Partial
<u>Includes largest party?</u>	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<u>Minimal Winner</u>	SPD-FDP	SPD-FDP	SPD-FDP-Greens	CDU/CSU-Greens	SPD-FDP-PDS	CDU/CSU-FDP	CDU/CSU-FDP-Greens	CDU/CDU-Greens	SPD-Left Party-Greens
<u>Bargaining Proposition</u>	SPD-FDP	SPD-FDP	CDU/CSU-FDP	CDU/CSU-Greens	CDU/CSU-FDP	CDU/CSU-FDP	SPD-Greens	CDU/CDU-Greens	CDU/CSU-SPD
<u>Adjacent?</u>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<u>MCW</u>	SPD-FDP	SPD-FDP	SPD-FDP-Greens	CDU/CSU-FDP	CDU/CSU-FDP	CDU/CSU-FDP	SPD-Greens	SPD-Greens	SPD-PDS/Left Party-Greens
<u>⊃MCW/Smallest ideological range</u>	SPD-FDP	SPD-FDP	CDU/CSU-FDP	CDU/CSU-FDP	CDU/CSU-FDP	CDU/CSU-FDP	SPD-Greens	SPD-Greens	SPD-PDS/Left Party-Greens
<u>⊃Mparty</u>	FDP	FDP	FDP	FDP	FDP	FDP	SPD	SPD	SPD
<u>⊃MpartyK</u>	SPD	SPD	CDU/CSU	CDU/CSU	CDU/CSU	CDU/CSU	SPD	SPD	SPD

Source: Forschungsgruppe Wahlen, 1983, 1987, 1990, 1994, 1998, 2002, 2005, 2009

FIGURE THREE. OPINION POLL RATINGS FOR FEDERAL GERMAN POLITICAL PARTIES/PARLIAMENTARY FACTIONS, SEPTEMBER 2005-JULY 2009

Source: Forschungsgruppe Wahlen, 2005, 2006, 2007, 2008, 2009

FIGURE FOUR. OPINION POLL RATINGS FOR GERMAN POLITICAL PARTIES BY POTENTIAL COALITION OUTCOMES, SEPTEMBER 2005-JULY 2009

Source: Forschungsgruppe Wahlen, 2005, 2006, 2007, 2008, 2009

FIGURE FIVE. HERFINDAL-HIRSCHMAN INDICES OF FEDERAL GERMAN PARTY SYSTEM COHESION/FRAGMENTATION, 1976-2009

Source: <http://www.wahlrecht.de>

Notes

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- ¹ Zohlnhöfer, R. (2009) 'Große Koalition: Durchregiert oder im institutionellen Dickicht verheddert?' *Aus Politik und Zeitgeschichte* B38: p. 9.
- ² Although inevitable, given the distribution of party weights and the strong normative requirement in the German context for majority government, prior to 2005 the 1966-1969 Grand Coalition was generally regarded as a singular and necessary evil at the federal level rather than a desirable coalition outcome under normal circumstances. The 1966-1969 coalition was responsible for some notable reforms but it is also thought to have undermined the notion of responsible party government and spurred the growth of the so-called 'extra-parliamentary' opposition on the political left; a process that would eventually lead a decade or so later to the emergence of the Greens as an electoral competitor to the SPD (see, inter alia, Andersen and Woyke, (1997) *Handwörterbuch des politischen Systems der Bundesrepublik Deutschland*. Bonn: Bundeszentrale für politische Bildung; Baker, K., Dalton, R., and Hildebrandt, K., (1981) *Germany Transformed: Political Culture and the New Politics*. Cambridge, MA: Harvard University Press; Beyme, K. von, (1991). *Das politische System der Bundesrepublik Deutschland nach der Vereinigung*. München: Piper; Lees, C. (2005) *Party Politics in Germany - a Comparative Politics Approach*. Basingstoke: Palgrave).
- ³ Müller, W. and Strøm, K., (2003) 'Coalition governance in Western Europe', in Müller, W. and Strøm, K., (eds.) *Coalition Governments in Western Europe*. Oxford: Oxford University Press: pp. 588-90.
- ⁴ March, J. G. and Olsen, J. P., (1984) 'The new institutionalism: organizational factors in political life', in *American Political Science Review* 78: p. 738.
- ⁵ Lees, C. (2011) 'The paradoxical effects of decline: assessing party system change and the role of the Catch-all parties in Germany following the 2009 Federal election', in *Party Politics* (forthcoming).
- ⁶ Martin, L. W. and Stevenson, R. T. (2001) 'Government formation in parliamentary democracies', in *American Journal of Political Science* 1. pp. 211-29.
- ⁷ Riker, William, 1962: *The Theory of Political Coalitions*. New Haven: Yale University Press.
- ⁸ von Neumann, J. and Morgenstern, O. (1944). *Theory of Games and Economic Behaviour* Princeton; Guildford: Princeton University Press.
- ⁹ Lees (2011) 'Paradoxical effects of decline'.
- ¹⁰ Gamson, William, 'A Theory of Coalition Formation', in *American Sociological Review*. 26. (1961): pp. 373-82.
- ¹¹ M. Leiserson, 'Factions and Coalitions in One-Party Japan: An Interpretation Based on the Theory of Games,' *American Political Science Review*, Vol. 62, No. 3 (1968), pp. 770-787.
- ¹² de Swaan, Abram. 1973: *Coalition Theories and Cabinet Formation*. Amsterdam: Elsevier.
- ¹³ Axelrod, R. *Conflict of Interest* (Chicago: Markham).
- ¹⁴ Debus, M. (2008) 'Office and policy payoffs in coalition governments', in *Party Politics* 14: pp. 515-38.
- ¹⁵ See Hanson, R. A. (1972). *Majority Rule And Policy Outcomes: A Critique Of The Calculus Of Consent*. PhD Thesis. Minneapolis: University of Minnesota; Hanson, R. A. and Rice, P.M. (1972). 'Committees, representation and policy outcomes' *Annals of the N.Y. Academy of Sciences*.
- ¹⁶ Laver, M. and Shepsle, K. 'Coalitions and Cabinet Government', in *American Political Science Review* 84 (1990): 873-90.
- ¹⁷ See Schofield, N. (1995) 'Coalition politics: a formal model and empirical analysis', in *Journal of Theoretical Politics* 7: pp. 245-81; also Schofield, N. (1993) 'Political competition and multi-party coalition government', in *European Journal of Political Research* 23: pp. 1-33.
- ¹⁸ Laver, M and Shepsle, K. (1998) 'Events, equilibria, and government survival', in *American Journal of Political Science* 42: 28-54; also Laver, M and Shepsle, K. (1996) *Making and Breaking Governments*. Cambridge: Cambridge University Press.
- ¹⁹ Schofield, N. (1996) 'The heart of a polity', in Schofield, N. (ed.) *Collective Decision-Making: Social Choice and Political Economy*. Boston MA: Kluwer: pp. 183-220.
- ²⁰ See Debus (2008) 'Office and policy payoffs'.
- ²¹ Linhart, E. and Shikano, S. (2007) 'Die große Koalition in Österreich: schwierigkeiten bei der Bildung, Stabilität und Alternativenlosigkeit', in *Österreichische Zeitschrift für Politikwissenschaft* 36: pp. 185-200; Gianetti, D. and Sened, I. (2004) 'Party competition and coalition formation: Italy 1994-96', in *Journal of Theoretical Politics* 16: pp. 483-515.
- ²² Sened, I. (1996) 'A model of coalition formation: theory and evidence', in *Journal of Politics* 58: pp. 350-72.
- ²³ Crombez, C. (1996) 'Minority governments, minimal winning coalitions and surplus majorities in parliamentary systems', in *European Journal of Political Research* 29: pp. 1-29.

²⁴ Baron, D. and Diermeier, D. (2001) 'Elections, governments, and parliaments in proportional representation systems', in *Quarterly Journal of Economics* 116: pp. 933-67.

²⁵ Shikano, S. and Linhart, E. (2010) 'Coalition formation as a result of policy and office motivations in the German federal states', in *Party Politics* 16 (1): pp. 111-130.

²⁶ See for instance Krehbiel, K. 'Spatial Models of Legislative Choice', in *Legislative Studies Quarterly*. 3. (1988): pp. 259-319.

²⁷ Rubinstein, A. (1998). *Modelling bounded rationality*. Cambridge MA: MIT Press.

²⁸ Simon, H. (1991). 'Bounded Rationality and Organizational Learning', in *Organization Science* 2(1): pp. 125-134.

²⁹ See Schoorman, F. D., Mayer, R. C., and Davis, J. H. (2007) 'An integrative model of organizational trust: past, present, and future'. *Academy of Management Review*, 32: 344-354; Serva, M. A., M. A. Fuller and R. C. Mayer (2005) 'The reciprocal nature of trust: a longitudinal study of interacting teams', *Journal of Organizational Behaviour*, 26: 625-648; and Schoorman, F. D., Mayer, R. C., and Davis, J. H. (1996) 'Organizational trust: philosophical perspectives and conceptual definitions'. *Academy of Management Review*, 21: 337-340 on company mergers; also Lees, C., Hough, D. and Keith, D. (2010) 'Towards an analytical framework for party mergers – operationalising the cases of the German Left Party and Dutch GroenLinks', in *West European Politics*, Vol. 34 (forthcoming) for an adaptation of the company merger literature in order to analyse party mergers.

³⁰ Shikano and Linhart (2010) 'Coalition formation as a result of policy and office motivations': p. 120.

³¹ See Warwick, P. (2001) 'Coalition policy in parliamentary democracies; who gets how much and why?', in *Comparative Political Studies* 34: pp. 1212-36; also Budge, I. and Laver, M. (1993) 'The policy basis of government coalitions: a comparative investigation', in *British Journal of Political Science* 23: pp. 499-519; and Budge, I. and Laver, M. (1992) 'The relationship between party and coalition policy in Europe. A synthesis', in Laver, M. and Budge, I. (eds.) *Party Policy and Government Coalitions*. New York: St Martin's Press.

³² Lees (2011) 'Paradoxical effects of decline'; also Lees, C. (2006) 'The German Party System(s) in 2005 – a return to *Volkspartei* dominance', in Clemens, C. and Saalfeld, T. (eds.) special issue of *German Politics* on 2005 German Federal Elections, Vol. 15. No.4: pp. 361-375.

³³ See Frederick, S., Loewenstein, G. And O'Donoghue, T. (2002) 'Time discounting and time preference: a critical review', in *Journal of Economic Literature* 40 (2): pp. 351-401; also Anand, S. and Sen, A. (2000) 'Human development and economic sustainability', in *World Development* 28 (12): pp. 2029-2049; Arrow, K. 'Inter-generational equity and the rate of discount in long term social investment', paper presented to the IEA World Congress (December) and available at www.econ.stanford.edu/faculty/workp/swp97005.htm

³⁴ See Solow, R. (1974) 'The economics of resources and the resources of economics', in *American Economic Review* 64 (2): pp. 1-14; also Harrod, R. (1948) *Towards a Dynamic Economics*. London: Macmillan.

³⁵ The process by which the Red-Green coalition model, for instance, became a 'coalitionable option' at the federal level involved a high-level of sunk costs. The model was developed at the sub-state level and was based on the selective emphasis of 'new politics' issues (such as environmental protection, group rights, and gender equality) around which the two parties could find common ground whilst ignoring many of the high politics issues, such as defence and security, that divided them. This process started with periods of unofficial co-operation between the SPD and Greens in Hamburg and Hesse in the early 1980s, as well as formal Red-Green coalitions in Hesse itself, West Berlin, Lower Saxony, Mecklenburg-Western Pomerania, and North Rhine Westphalia, as well as a minority Red-Green coalition ('tolerated' by the PDS) in Saxony-Anhalt. In addition there were two rather unsuccessful 'Traffic-Light' coalitions in Brandenburg (with Alliance 90 and the FDP) and Bremen (with the Greens and the FDP). The end result of this process of co-operation was the formal coalition agreement between the SPD and Greens at the federal level that made possible the Red-Green coalition, under Chancellor Gerhard Schröder, that governed Germany between 1998 and 2005. Crucially, however, in order to enter federal government the Greens had to drop their principled objection to Germany's NATO membership in the run-up to the 1998 election, thus eliminating the most important barrier to their participation in national government. Nevertheless, the issue of German foreign policy – most notably German involvement in the 1999 Kosovo campaign – remained an area of intense conflict between elements of the Greens' leadership and between the leadership and grass roots. Inevitably, this also had negative externalities for coalition management more broadly (see Lees, C. (2000) *The Red-Green Coalition in Germany; Politics, Personalities, and Power*. Manchester: Manchester University Press).

³⁶ Neumann, S., (1956) 'Towards a comparative study of political parties', in Neumann, S. (ed.) *Modern Political Parties*. Chicago: University of Chicago Press.

³⁷ Key, V., (1964) *Politics, Parties, and Pressure Groups*. New York: Crowell.

³⁸ Wolinetz, S., (2002) 'Beyond the Catch-all party: approaches to the study of parties and party organisation', in Gunther, R., Montero, J., and Linz, J., (eds.), *Political Parties: Old Concepts and New Challenges*. Oxford: Oxford University Press.

³⁹ Ware, A. (1987) *Citizens, Parties, and the State*. Cambridge: Polity Press.

⁴⁰ Kirchheimer, Otto (1966) 'The Transformation of Western European Party Systems', in LaPalombara, J. and Weiner, M. (eds.) *Political Parties and Political Development*, pp. 177-200. Princeton, NJ: Princeton University Press.

⁴¹ Specific institutional characteristics include a broad social spectrum of members, a pluralistic organisational structure and a professional staff. Programmatic characteristics include the downplaying of ideology and the construction of electoral narratives designed to a broad electorate.

⁴² Lees, C. (2005) *Party Politics in Germany: a Comparative Politics Approach*. Basingstoke: Palgrave.

⁴³ Of course, this party-political penetration of the state went beyond the CDU/CSU and SPD. It encompassed the FDP and, in subsequent decades, the Greens and, eventually, even the PDS would be able to place key cadre at least within at least the state-level civil service. But, because of the high levels of popular support they enjoyed until the late 1980s, the Volksparteien defined themselves as the key guardians of the political consensus.

⁴⁴ Lees, (2005) *Red-Green coalitions*.

⁴⁵ Wiesendahl, E. (1990) 'Der Marsch aus den Institutionen'. *Aus Politik und Zeitgeschichte*, B21.

⁴⁶ Scheuch, E. and Scheuch, U. (1992) *Cliquen, Klüngel und Karrieren*. Hamburg: Reinbek.

⁴⁷ Jeffery, C. and Lees, C., 1998. 'Whither the Old Order? The role of West German parties in the last days of the German Democratic Republic' in Philip Davies and John White (eds.) *Political Parties and the Collapse of Old Orders*. New York: SUNY Press.

⁴⁸ Pappi, F., (1984) 'The West German Party System'. *West European Politics* 7: 7-26.

⁴⁹ Gordon Smith, for instance, considered the high levels of party system concentration and narrow ideological range as being part of Germany's 'efficient secret', based around 'the politics of centrality', that generated both 'governing' and 'social' cohesion in a manner that eluded many other less happy polities (Smith, G., 1986 *Democracy in Western Germany* (3rd edition). Heinemann: 231-5).

⁵⁰ Paterson, W. E. and Sloam, J. (2009) 'The SPD and the debacle of the 2009 federal elections: an opportunity for renewal'. London: Friedrich Ebert Stiftung briefing paper; also Lees, C. (2010) 'Rule-makers and rule takers: on Volkspartei Adaptation and Strategy' in *German Politics*, Vol. 19, No.1.

⁵¹ There are two types of swing: first, 'negative' swing (where a party's withdrawal of support turns a winning coalition into a losing coalition) and second, 'positive' swing (where a party's support turns a losing coalition into a winning coalition).

⁵² See Lees, C. and Taylor, A. (2006) 'Explaining the 2005 Coalition formation process in Germany – a comparison of Power Index and Median Legislator coalition models' (with Andrew Taylor) in *Politics* Vol. 26, No.3: 151 - 160.

⁵³ see for example, Schubik, M., (1967): p.249, cited in Hinckley, B. (1981) *Coalitions And Politics*. Harcourt Brace Jovanovich.

⁵⁴ It is possible, of course, that surplus majority coalitions may form that are in effect minimal winning coalitions with the addition of at least one dummy player (i.e. parties with no swing, irrespective of the number of seats held). The arithmetical reality for a dummy player is that any coalition that wins and includes a dummy can still win without the dummy. Under these circumstances, two out of n players will have swing. In real-world politics, there may be circumstances in which such a coalition might form in order to create a 'balanced ticket' (perhaps for reasons of intra-coalition management or in search of national unity in times of crisis). However, the formation of formal surplus majority coalitions with dummy players is not normal practice in the German party system.

⁵⁵ It should be noted that Figure Four is not a time series of polled responses to possible coalition options but rather an aggregation of support for parties, ordered by possible coalition options. It may therefore differ from actual responses of popular support for potential coalition options. However, given that the public are not polled on the outcome of real world coalition negotiations, this distinction is not crucial to the analysis.

⁵⁶ There was a renewal of interest in the Social-Liberal option during the brief tenure of Kurt Beck as Chairman of the SPD from 2006 to 2008 but this came to nothing. Nevertheless, the possibility of a Social-Liberal coalition being formed in the future, or even the more implausible coalition between the SPD, FDP, and Greens, cannot be ruled out unequivocally.