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THE GROWTH OF THE WELFARE STATE
IN FOUR WESTERN EUROPEAN SOCIETIES:
A COMPARISON OF THREE PARADIGMS

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The Growth of the Welfare State in Four Western European Societies:

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The Growth of the Welfare State in Four Western European Societies:

A Comparison of Three Paradigms

The purpose of this paper is to explore the applicability of explanations derived from three general social science paradigms to the rise of the welfare state in Western Europe, and particularly its development in Germany, Britain, France, and Italy during the period 1870 to 1965. During this century, government spending on health, welfare, and social security has grown from less than 1% of GNP in 1870 to more than 20% in the 1970s in some nations, and is one of the single most important facts about that time period. It has had a dramatic effect on the everyday life of the common man. To be able to go to the hospital and not be treated as an indigent, to have money enough to live in retirement without too much fear, and to know that in case of unemployment or the wage earner's disability that at least some income will be available is a far cry from the Social Darwinian world of the 1860s and 1870s.

The growth of the welfare state is analyzed in two alternative ways. The first part of the paper focuses on the simple growth of government social welfare activity as a share of GNP, and is useful to examine long-run structural change. The second part of the paper reconceptualizes the growth of the welfare state as the responsiveness of the state to social welfare need; that is, "welfare statism" is seen as the size of the gap between the needs of the population for health, welfare, and social security as a share of GNP, and government effort in these areas as a share of GNP. This second approach allows us to focus more clearly on the dynamic nature of increasing state involvement, leaving aside differences between nations in the general level of effort.

Explanations of the origins and growth of government social welfare activity are not lacking. To date, however, there are several competing alternatives, each derived from a different paradigm and rarely examined relative to one another. In this paper, we intend to explore explanations derived from three general social science paradigms: general equilibrium theory (demand-supply models), political interest group and conflict theory (power models), and cybernetic theory.

General equilibrium theory explains the growth of the welfare state as a functional response to the needs of industrializing societies within the constraints of scarce resources. As industry becomes the predominant mode of production, it is argued, new needs for health, welfare, and social security arise. These needs cannot be filled by traditional means, and consequently state activity grows. This growth may be inhibited, however, if the per capita wealth generated by industrialization is insufficient to meet the need, or if the state is unable to extract an increasing share of this growing wealth for social welfare activity.

The power models of conflict theory emphasize the importance of the organization and strength of interest groups in determining the extent to which the state becomes involved in social welfare activity. From the power model perspective, increases in the need for governmental social welfare activity and the existence of resources that could be utilized for this purpose are insufficient conditions for the growth of the welfare state: The more important proximate cause is the capacity of interest groups to struggle for or to resist changes in the distribution of resources.

Cybernetic theory recognizes yet another set of causal factors in the growth of state social welfare activity: The state may respond directly to

increasing social welfare needs without the intermediate influence of interest groups. If the means exist to monitor social welfare need and if the state as an organization is structured in such a way as to make responsiveness possible, the state may respond directly to increasing need or may successfully resist the pressures of interest groups.

In the pages that follow, an attempt is made to empirically examine each of these explanations, both individually and jointly. Such an examination, whatever its particular deficiencies, serves two major purposes. First, it enables us to gain greater insight into the conditions under which each explanation is operative and moves us toward a better understanding of the complex interrelationships of the several explanations. Second, empirical examination of the four cases provides a more sound theoretical basis for the historical explanation of the growth of the welfare state in France, Britain, Germany, and Italy. By improving our understanding of the interrelationships of factors that underlie the growth of state social welfare activity in general, the unique combinations that are operative in particular times are highlighted.

1. METHOD

The four nations examined here--France, Britain, Germany, and Italy--were chosen for a number of reasons. First, while all are western, basically capitalist, and more or less democratic, the nations display a good deal of variation in the timing and extent to which the government has become involved in social welfare activity. Similarly, the nations display considerable variation in indicators of the various explanations. The size of target

populations, the extent and rate of industrialization, interest group strengths, the development of communications, and changes in governmental structure are sufficiently varied both within and among the nations. The generalizability of the results reported here to all nations at all points in time is highly problematic; these four nations are, however, representative of much of Western Europe and are interesting cases in themselves.

The period of time chosen, 1870-1938 and 1946-65, is designed to bracket the period of maximum change in the state social welfare role. Statistical results calculated over this period may not be representative of the previous long history in which no basic change occurred in governmental social welfare activity, and may not predict the future; they do, however, provide a picture of the period of basic alteration in institutional pattern. The years of the First World War were intentionally included, and those of the Second World War were excluded only because of the unavailability of data. This was done because adequate general theory should provide a framework for explanation in periods of both war and peace. The numbers reported in this paper are zero-order correlations and partial correlations calculated within each nation over the 88-year period 1871-1938 and 1946-1965.

Calculation over the entire time period raises some difficulties to which we must be sensitive. As presently calculated, the figures reported here represent the "average" picture of the entire time period. This almost certainly hides subperiods for which results would differ. The existence of subperiods not captured by our analysis is also due to linear estimation, whereas many of the relationships examined here may be nonlinear. For example, the effects of slack resources on social welfare may be different than they are for the period as a whole in periods of very low real GNP

per capita or periods of rapid growth in GNP. A preliminary analysis of the residuals of several of our models for France shows, for example, that parametric structures are somewhat different in the periods 1872-1902 and 1902-1915 than for the century as a whole. In future work a closer examination of these subperiods will enable us to specify further the conditions under which the various explanations have differential importance.

The correlations reported in this paper should be interpreted with some caution. They are not a direct representation of a causal model; rather, they describe the average tendencies in the histories of social welfare in each nation. Where emphasis is placed on partial correlations, the reader should keep in mind that the numbers are calculated from a simple linear additive combination of the indicators of the various theories. To the extent the relationships among the elements are not of this form, partial correlations should be interpreted only heuristically, not as direct tests of a theory. As theory becomes more adequate in specifying the precise nature of these interconnections, statistics become more meaningful.

Data were collected at yearly intervals over the period. Our indicators have, in most cases, been defined as ratios of one type or another, and each indicator of independent variables was divided by its 1938 value to enable us to add the indicators into indexes. The use of ratio variables is a necessity for comparative research: It is not very meaningful to say that the French were spending 16 million francs on social welfare and the Germans 5 million marks. Ratio variables are, however, somewhat more likely to display nonlinear effects, as they usually have "floors" and "ceilings"--

social welfare effort as a share of GNP cannot be less than zero or greater than one. Most of the indicators utilized in this paper are not, at least obviously, affected by such level effects and do display adequate variation.

Despite these potential difficulties, and numerous caveats about measurement and index construction that follow, the results reported here are a considerable improvement over the current literature. Some attempt have been made to recognize and operationalize the complexities of the various concepts, although more may be done. By examining time series rather than cross-sections, and by developing the concept of unmet need, considerable progress has been made in moving toward a dynamic analysis of the growth of social welfare.

2. THE GROWTH OF PUBLIC EXPENDITURES ON SOCIAL WELFARE

The concept "welfare state" has been used in numerous ways. Our study does not attempt to analyze the intellectual history of the transition from minimal state welfare activity to the current heavy involvement. We have chosen as our primary empirical indicator the share of GNP (NNP in Germany) expended by all levels of government and social security administration for health, welfare, and social insurance purposes.

In our classification of governmental expenditure, we have followed the general principles of Pryor (1968) and attempted to gather together expenditures on programs that function primarily to maintain families and individuals in the face of social risks: unemployment, work injury, old age, ill health, etc. This categorization is somewhat narrower than the definition of "social expenditure" that includes education and housing. Our concern then is with public, not private, activity to maintain

individuals and families in the face of social risk. We are not concerned here with the degree of redistribution engendered by the growth of these programs, or with differences in emphasis among nations in the mix of social welfare services within our general category.

By our definition of social welfare effort (all government expenditure for health, welfare, and social security), the experience of France, Britain, Germany, and Italy from 1870 to 1965 has been one of enormous and varied growth (see Figure 1). Starting in the 1870s at barely 1 or 2% of GNP, government social welfare effort had increased in all nations, until by 1965 it had reached 22.8% in France, 16.6 in Germany, 10.8 in Britain, and 5.5 in Italy. The paths by which the nations have attained their 1965 levels are quite varied. Growth is extremely slow in Italy up to 1960 and in France up to 1946. British social welfare effort growth begins quite early, but is relatively smooth and, by comparison, slow. Germany expands rapidly until the end of Weimar and remains at a relatively high but stable level thereafter. We must ask ourselves whether any general explanation can enlighten these diverse, unique histories. What insights can be gained by attempting to explain these histories within each of the general paradigms, and to what extent does the historically unique variation among these nations aid us in attempting to refine our understanding of the complex interrelationships among the elements of each theory? We turn now to our three general paradigms and their analytical acuity.

3. EXPLANATION OF GENERAL EQUILIBRIUM THEORY

Approaches within this paradigm conceptualize the problem of the growth of the welfare state as a direct system response to either the new needs of

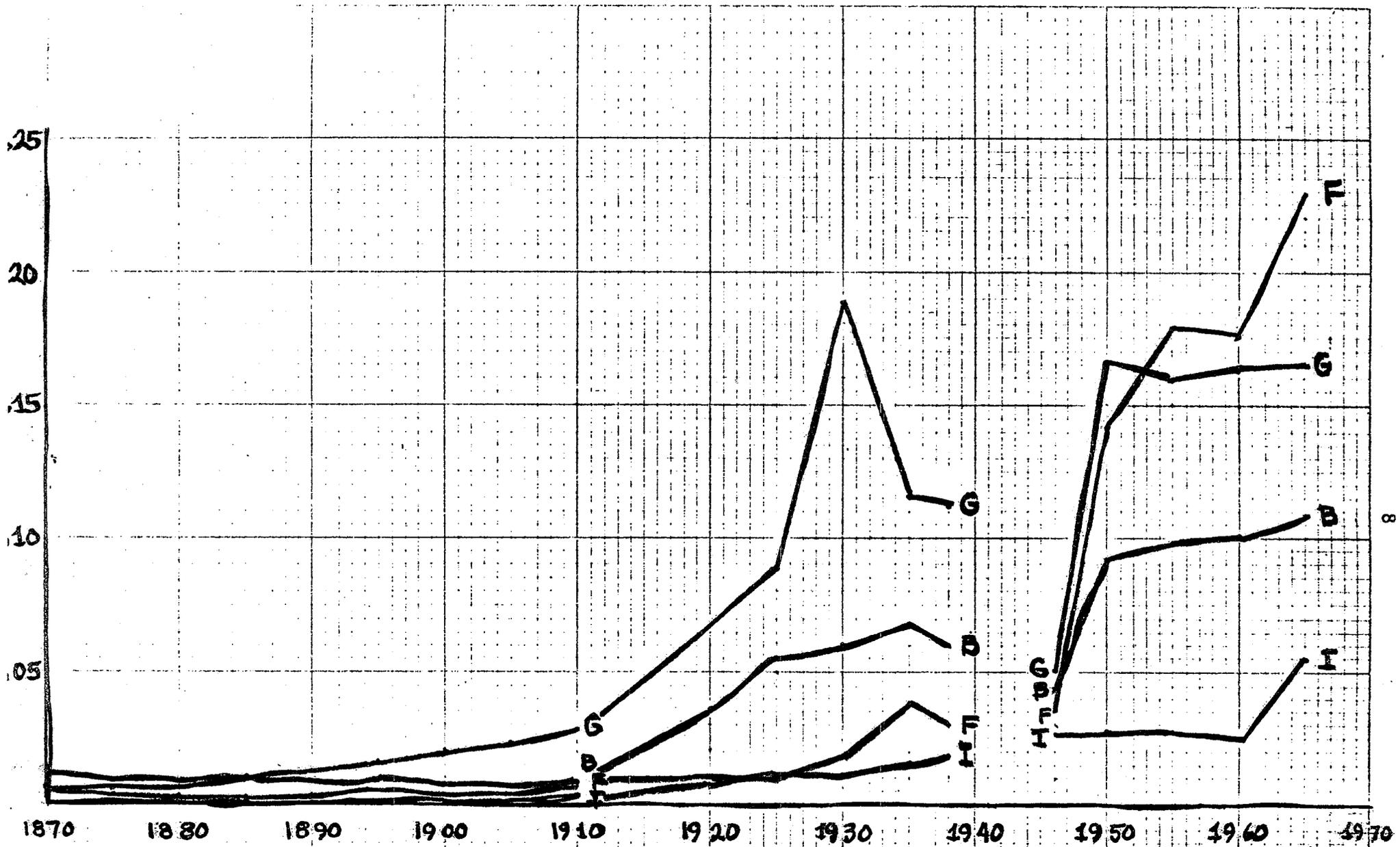


Figure 1. All government expenditure for social welfare as a percentage of G.N.P.

industrial society (e.g., Polyani, 1944) or to the greater wealth available from industrialization being utilized to fill recognized welfare needs (e.g., Wilensky, 1975)--what the organizational literature would call "slack resources" (Cyert and March, 1963). The demand side of the equation suggests that industrial society creates new needs for a state social welfare activity because increasing proportions of the population fall into vulnerable economic positions such as old age, unemployment, and incapacity through illness. Simultaneously, the capacity of the private sector to meet these needs declines with the reduced importance of subsistence agriculture, the extended family, and private charity. Public activity has to increase to fill the gap.

"Supply" or "slack resources" approaches emphasize that the increasing wealth generated by industrial societies enables a greater allocation of resources to the already recognized problems of risk. The generally accelerating economic growth of the past century has made available funds for other priorities beyond the traditional ones of external security and internal order. The government becomes the logical agent because of economies of scale (Pryor, 1968; Ellul, 1964) as well as the incapacity of the private sector to keep pace with the growth in need.

Supply

The supply side of the general equilibrium approach argues that it is the availability of resources rather than increasing demand that is more central to explaining social welfare effort. To examine this argument an index of "slack resources" was constructed. This index is composed of several elements. The first is real GNP per capita, an obvious and direct indicator of changing system resources. In all four nations, the real

per capita wealth has increased dramatically over the century. Indexed to 1938 = 1.0, the real per capita GNP in France grew from .382 c. 1870 to 1.36 at 1965; in Germany from .421 to 2.13; in Britain from .722 to 1.46; and, in Italy from .584 to 2.08. A second indicator is the proportion of the labor force in industry and mining. Industrialization, by monetarizing exchanges and spatially concentrating the labor force, creates new capacities for extraction of resources via taxation (Musgrave, 1969). Indeed, most social security programs are built on employer and employee taxes, a form of resource extraction only practical under industrial conditions. A third component of the slack resources index is real government expenditure. Here government expenditure stands as an indirect measure of the ability of government to extract resources.

Table 1 indicates that each nation's history is characterized by a strong association between slack resources and public welfare effort. The association is strongest in Britain and Italy, weakest in France. If one looks at the separate effects of the components of the index, real GNP per capita, the proportion of the labor force in industry, and government revenues, it is the latter that has the strongest partial correlation.

Table 1

Correlations of Slack Resources with Social Welfare Effort

	Britain	France	Germany	Italy
Slack Index	.83	.49	.73	.90

In part, there is a certain tautology in the index, in that total government expenditures include welfare effort as one of its components. If the index

is rerun dropping the government expenditure item, the same essential picture emerges.

For each of the four nations, the associations in Table 1 lend some plausibility to the notion that the level of resources and government ability to tap them is a significant constraint on social welfare effort. For instance, the extremely strong associations observed in Italy and Britain may well represent in the first case, poverty throughout the entire period of study, and in the second, difficulties arising from stop-go growth since the 1890s. The moderately strong association in Germany might also be traced to the major interruptions of war, revolution, and inflation. It may be that "slack resources" operate as a constraint on social welfare effort only under conditions of irregular or little growth, and have a lesser impact where industrialization proceeds more regularly, regardless of its rate of growth, as in France. A closer examination will be undertaken in future work to determine the characteristics of subperiods during which slack resources are closely associated with social welfare effort.

Demand

Demand explanations of the growth of governmental social welfare activity emphasize that the increasing share of national product devoted to this purpose is the direct result of increased need. Creating a direct measure of need for social welfare as a share of GNP is fraught with difficulties, but is necessary if the role of need, or demand, in welfare expenditure growth is to be understood. Previous attempts (e.g., Wilensky, 1975) have tried to estimate need by the size of various populations "at

risk" due to old age, illness, work injury, or other causes. We follow the same essential strategy, except that we attempt to translate the needs of these populations into a monetary value so that need, like social welfare effort, may be expressed as a share of national product.

The demand index is composed of several elements, each attempting to tap a dimension of need for social welfare activity. The first component is the number of unemployed persons times the average salary. Available data on unemployment refer only to unemployed union members or to registered unemployed. While such figures do not reliably represent the total number of unemployed or underemployed persons in the societies over time, they do represent more closely the number of persons who had no recourse to traditional sources of social welfare.

The second component of the demand index represents the needs of the aged population. We take the number of persons aged 65 and over and multiply this by one-half the average worker's salary. The number of aged persons in the nations has increased rather dramatically over time from 7.5% of the population of France in c. 1870 to 11.9% in 1965; from 4.7% to 12.1% in Germany; from 4.8% to 12.1% in Britain; and from 5.1% to 10.3% in Italy. The unemployment component and the aged component were then added together and expressed as a proportion of the national product. As a result of this method of construction, the index of demand is responsive to three types of changes: the number of unemployed, the number of aged, and the standard of living as reflected in average wages.

The two elements of the demand index do not exhaust the list of populations at risk. Specifically, social welfare programs have risen that are addressed to the needs of dependent children, those in chronic poverty,

the disabled, and persons needing medical care. These components of demand have not been directly measured here, but to a certain extent these needs are associated with the measured components; for example, the need for health care is very highly associated with age (C.R.E.D.O.C., 1974). Despite its shortcomings, the current index is a step forward in that it recognizes at least some of the multiple constituencies of social welfare, and expresses this need as a share of available resources.

Zero-order correlations between the demand index and government social welfare effort are presented in Table 2.

Table 2

Correlations Between the Demand Index and Social Welfare Effort

	Britain	France	Germany	Italy
Demand Index	.42	.22	.81	.47 ^a

^aIn Italy the unemployment component has been left out because of missing data in the pre 1914 period.

As expected, the associations are positive for all four nations, but of only moderate strength in all but Germany. One plausible interpretation of the greater importance of demand indicators in Germany may be derived from Wilensky (1975), who argues that the length of time that programs have existed is the best single indicator of their level of expenditure. As Germany established many of its programs earlier than the other nations, the demand for social welfare services was able to find direct and immediate response through already existent programs. In the other nations, the effect of changes in demand for social welfare are more indirect, in

that the demand must lead to the establishment of programs before responses can occur. If this interpretation is correct, it indicates that the dynamics of establishing programs and extending their coverage may be more important than simple need.

In Table 3, partial correlations of both the demand index and the slack resources index with social welfare effort are reported. (In Table 3 and all following tables, partial correlations are based on a linear additive model, and zero-order correlations appear in parentheses.) The results are not very different from the zero-order associations.

Table 3
Partial Correlations of Demand and
Slack Resources with Social Welfare Effort

	Britain	France	Germany	Italy
Demand Index	.36(.42)	.40(.22)	.70(.81)	.25(.47)
Slack Index	.82(.83)	.57(.49)	.55(.73)	.88(.90)
Combined (R)	.86	.60	.87	.91

The slack resources index remains more important in Britain, France, and Italy; the demand index remains more important in Germany. In France an interaction effect is observed that increases the importance of each index when both are considered simultaneously. In all four nations the availability of resources and particularly the government's ability to tap them is a constraint on social welfare effort. By examining the other paradigms some insight can be generated into the conditions under which the resource constraint is more or less important. The stronger association of the

demand index with social welfare effort in Germany may indicate that it is not need for social welfare in itself that is critical in explaining social welfare effort, but rather the manner in which need is expressed.

4. POLITICAL INTEREST GROUP AND CONFLICT THEORY

The general levels of need for social welfare activity and the supply of resources may form only very loose constraints on actual government activity. Additional factors must be considered to explain the expanding government role. As we have seen, governments act as if they were responding to the increasing needs for social welfare in industrializing society. These responses, however, vary considerably from one nation to another. One explanation that has been advanced for this variation is that while needs may be similar across societies, it is the effective representation of these needs in the form of political activity to which the State responds. Thus, the relative power of groups favoring an increased or decreased government role provided the proximate cause of change in government social welfare effort.

The idea that interest group pressure is an important factor in explaining differences in social welfare effort is also amenable to empirical examination. We have supposed, for preliminary analysis, that pressure on the government to expand or restrict its social welfare activity can be tied to the strength of two political forces. The Left, favoring expanded activity, is indicated by the strength of unions and the size of the socialist vote. The Right, favoring restricted social welfare effort, is indicated by the proportion of the labor force in agriculture and

services, votes for rightist and centerist parties, and the proportion of industry in small establishments.

The index of Left strength is composed of two elements, each indexed to the 1938 value, and added together. The first element is the number of members of workers' industrial unions divided by the number of persons in the mining and industrial sectors of the labor force. The second element is the proportion of all votes in national legislative elections received by members of socialist parties. Each indicator has some difficulties. In the case of union memberships, data are often unreliable, and no account is taken of the internal cohesion of the labor movements. Our colleague, J. Rogers Hollingsworth, has suggested that the major splits within the labor movements of Italy and France may be so critical in weakening the Left, particularly in recent years, that our indicator is of questionable validity. With regard to the voting component, the strength of communist parties has not been taken into account. This is also a problem of primary importance in France and Italy, such that our estimates of Left strength for recent years may considerably understate the reality. In both France and Italy, the major growth of communist strength has been since the Second World War, the same period in which social welfare effort expands rapidly. One is led to conclude that our models for France and Italy probably understate the importance of Left strength in explaining the growth of social welfare effort.

The index of Right strength is composed of three elements, each indexed to its 1938 value and added together. The first element is the proportion of the labor force in agriculture and services, the second is the proportion of all votes received by rightist and centerist parties

in national legislative elections, and the third is the average size of industrial establishments.

To treat the labor force share in agriculture and services as an indicator of the demographic base of conservative political forces is somewhat problematic. With regard again to France and Italy, there have existed large numbers of agricultural laborers and tenant farmers who are anything but conservative in their political views. Similarly, service sector occupations, particularly those at higher levels, do not necessarily predispose their practitioners to a conservative philosophy. Despite these difficulties, the labor force share in agriculture and services is strongly associated with the other elements of the Right strength index and stands as a first attempt to estimate the occupational basis of rightist support. The most powerful element of the Right strength index is the average size of industrial establishments, which unfortunately is unavailable for Italy. The average size of industrial establishments is an indicator of the relative importance of craft and small scale industrial firms in the economy, and is supposed to be associated with a lower capacity to organize large numbers of industrial workers.

In Table 4, the correlations between the Right and Left strength indexes and social welfare effort are presented.

Table 4
 Partial Correlations of Right and
 Left Strength with Social Welfare Effort

	Britain	France	Germany	Italy
Left	.91(.62)	.05(.52)	.30(.77)	.18(.16)
Right	-.91(-.60)	-.42(-.23)	-.46(-.80)	-.17 ^a (-.15)
Combined (R)	.95	.63	.82	.23

^aAverage size of firm is not available for Italy.

As with the zero-order associations of slack resources and demand, all of the associations are in the expected directions. And just as Germany was atypical in the role played by demand, so is Britain with regard to the strength of political factors. The exceptional role played by demand in Germany led to the insight that the nation was unique in the extent to which institutional patterns have led to the importance of direct expression of demand. In the case of Britain, the exceptional strength of partial correlations between Left and Right strength and social welfare effort raises the question of the importance of the unique institutional patterns that may have generated this result. Questions are raised about the manner in which other factors inhibit the effect of political strength on social welfare effort in France, Germany, and Italy--but not in Britain. Some insights into this question are obtained by examining the impacts of the cybernetic paradigm, but before this is undertaken, we must pause to consider the effects of political factors in modifying the effects of resource constraints and needs for social welfare.

In Tables 5 and 6, partial correlations are presented between the slack resources index, Right and Left strength, and social welfare effort. The purpose of this particular exercise is to obtain greater insight into the differences among the nations in the ways that capacities to extract slack resources may constrain the effects of political activity on social welfare effort.

Table 5

Partial Correlations of Slack Resources and
Left Strength with Social Welfare Effort

	Britain	France	Germany	Italy
Slack	.81(.83)	.36(.49)	.41(.73)	.90(.90)
Left	.55(.91)	.41(.05)	.53(.30)	.18(.18)
Combined (R)	.86	.60	.81	.90

Table 6

Partial Correlations of Slack Resources and
Right Strength with Social Welfare Effort

	Britain	France	Germany	Italy
Slack	.46(.83)	.09(.49)	.39(.73)	.90(.90)
Right	-.51(-.91)	-.47(-.42)	-.60(-.46)	-.10 ^a (-.17)
Combined (R)	.88	.63	.83	.90

^aAverage size of firm is not available for Italy.

In Italy, perhaps due to weaknesses of measurement in political variables, the effects of resource constraints and political strength are independent, with resource constraints retaining a preponderant influence. As Italy is by far the poorest nation examined over the entire time period, it may well be that at very low levels of slack resources the political system is so constrained that the relative strengths of the Right and Left make very little difference. A similar picture emerges for Britain, a nation periodically plagued with resource constraints. Here, while Left strength remains an important determinant, its effect on social welfare effort is considerably constrained by slack resources. The effect on Right strength is somewhat different in Britain, both the impacts of slack resources and rightist strength are reduced. This indicates a strong interaction of the effects such that resource constraints and rightist strength are consistently acting together throughout the time period to reduce social welfare effort.

In both France and Germany, controlling for resource constraints strengthens the importance of political variables (as is seen by comparing the zero-order associations of Right and Left strength, in parentheses, with the partial associations). For France and Germany over this time period, the picture emerges that it is not the existence of slack resources in themselves that constrain social welfare effort, but rather the existence of resources coupled with a predisposition to expend them for social welfare purposes that is important. Unless mechanisms exist that automatically translate need into social welfare expenditure (as in Germany), one cannot properly understand the growth of social welfare effort without seeing it as a struggle over the allocation of scarce resources. At extremely

low levels of slack resources (as in Italy), or where the growth of slack resources is much slower than the growth of need (as in Britain), resource constraints may act to considerably reduce the effects of political factors.

We have seen thus far that increasing need for social welfare activity in and of itself does not generate an automatic governmental response, except in Germany where a rather unique institutional means was developed quite early in the period. The role of slack resources in the development of social welfare effort appears to be quite important at low levels of resources, serving to constrain social welfare effort regardless of political factors (as in Italy). Insufficient slack resources to meet rising needs is also quite important in Britain, acting to limit the effects of leftist strength and acting in concert with rightist strength to restrain social welfare growth. In France and Germany the constraints of resource availability tend to enhance the importance of political factors.

5. ORGANIZATIONAL-CYBERNETIC THEORY

The third general paradigm places emphasis on the flow of information and factors that promote or inhibit responsiveness to information. It has been argued that increasing education, transportation, and communication tends to lead to greater responsiveness to need on the part of government, regardless of whether direct political pressure is present (e.g., Flanigan and Fogelman, 1971). This connection is supposed to exist both because of increased government ability to monitor need and because more interests are effectively represented through "social mobilization". State responsiveness, however, may be constrained if political representation of these

interests is limited and if the central government has dominant control over all public effort.

We use as an indicator of the social mobilization information-feedback argument an index composed of education, and communication-transportation variables. The education variable is the ratio of students enrolled in secondary and higher education to the population ages 15 through 19, indexed to 1938 = 1.0. The communication-transportation component of the index is the natural log of the unweighted sum of mail, telegraph messages, telephone calls, radio and television ownership, automobile ownership, railroad and air passenger kilometers, and newspaper circulation indexed to 1938 = 1.0. It should be noted that our data for Britain do not at present include private secondary enrollments, the only major form of such education up to about 1910. The failure to include private secondary education leads to an overstatement of the growth of secondary education between 1910 and 1965 and consequently may be biasing the association between the information index and social welfare effort in an upward direction.

Our indicator of government ability to respond, or centralization, is an attempt to measure the degree to which central government is insulated from the pressures arising from social mobilization. The centralization index is composed of two elements, each indexed to 1938 = 1.0 and added together. The first element is a "political development" index composed of the duration of the executive, and several trichotomies representing the effectiveness of the legislature, and the degree to which the executive is responsible to the legislature. It is generally argued in the political science literature (Banks, 1971) that these variables are measures of the autonomy of the state from popular pressure. The second element is the

ratio of central government to all government expenditure. Again, the greater the score on this indicator, the greater the independence of central authorities from popular pressure.

The essential hypotheses of the organizational-feedback approach are that as information-social mobilization increases, need is better recognized and more effectively responded to by government. Centralization is a more complex problem. On the one hand, the relative autonomy of the state may be utilized to formulate and impose social welfare efforts rapidly and effectively. On the other hand, such a concentration of power may provide a bastion from which to resist popular pressure for social welfare effort. In Table 7, the partial correlations of the information and centralization indexes are presented.

Table 7
Partial Correlations of Information and
Centralization Indexes with Social Welfare Effort

	Britain	France	Germany	Italy
Information	.89(.86)	.62(.61)	.60(.73)	.90(.88)
Centralization	.24(.20)	-.03(-.15)	-.58(-.81)	.40(.08)
Combined (R)	.89	.63	.88	.90

For each nation, the period 1871-1965 is one in which high information-mobilization levels and high levels of social welfare effort have high frequency of joint occurrence. In Britain and Italy, there is a tendency for periods of central executive autonomy to correspond to periods of stronger social welfare effort. There is no observable tendency in France,

and relatively strong negative tendency in Germany. More insight into the relative importance of the information and centralization arguments as dominant characteristics of each nation's history can be gained by statistically controlling for the tendencies observed previously from resource constraints and political pressures. In Tables 8, 9, and 10, these partial correlations are given.

Table 8

Partial Correlations of Slack Resources, Information, and
Centralization with Social Welfare Effort

	Britain	France	Germany	Italy
Slack	.08(.83)	-.17(.49)	.20(.73)	.26(.90)
Information	.59(.86)	.48(.61)	.18(.73)	.19(.88)
Centralization	.20(.20)	-.04(-.15)	-.60(-.81)	.21(.08)
Combined (R)	.89	.64	.89	.91

Table 9

Partial Correlations of Right Strength, Information, and
Centralization with Social Welfare Effort

	Britain	France	Germany	Italy
Right Strength	-.55(-.60)	-.21(-.63)	-.35(-.80)	-.16(-.15)
Information	.68(.86)	.20(.61)	.35(.73)	.90(.88)
Centralization	.31(.20)	.04(-.15)	-.54(-.81)	.32(.08)

Table 10

Partial Correlations of Left Strength, Information and Centralization
with Social Welfare Effort

	Britain	France	Germany	Italy
Left Strength	.34(.62)	.23(.52)	-.28(.77)	.24(.16)
Information	.84(.86)	.46(.61)	.59(.73)	.90(.88)
Centralization	.15(.20)	-.01(-.15)	-.60(-.81)	.39(.08)

In Table 8, we note again that resource constraint is not the dominant characteristic in all but Italy. The independent correspondence of information with social welfare effort remains quite strong in Britain and France but is considerably reduced in Germany and Italy by taking resource constraints into account. The correspondence of the level of centralization and the level of social welfare effort is not modified by considering periods of tight or slack resources.

In Tables 9 and 10, we find a considerable reduction in the correspondence of high levels of Right and Left strength, with low and high levels respectively of social welfare effort in Germany and France once information and centralization factors are taken into account. In France and Germany it appears that the period 1871-1965 is one in which governmental response is not, on the average, attributable to direct political pressure. In Britain mass political indicators correspond rather well to social welfare effort despite controls. In Italy, the dynamic is characterized, in the long-run at least, by resource constraints, social mobilization, and independent response by government.

6. DOMINANT CHARACTERISTICS IN THE LEVEL OF SOCIAL WELFARE EFFORT

In Table 11, we turn to a consideration of the relative correspondence of the indicators of all three paradigmatic approaches to levels of social welfare effort. The results in this table provide some clues as to the major differences among the nations over the entire century in the correspondence between periods of the independent variables and periods of social welfare effort.

Table 11
Partial Correlations of All Independent Variables
with Social Welfare Effort

	Britain	France	Germany	Italy
Demand	.13(.42)	-.01(.22)	.42(.81)	.25(.47)
Slack	-.25(.83)	-.07(.49)	.31(.73)	.24(.90)
Right	-.85(-.60)	-.06(-.63)	.47(-.80)	-.20(-.15)
Left	.81(.62)	.10(.52)	-.25(.77)	.29(.16)
Information	.38(.86)	.17(.61)	-.05(.73)	.16(.88)
Centralization	.24(.20)	-.02(-.15)	-.57(-.81)	.04(.08)
Combined (R)	.98	.66	.94	.92

The first thing to note about the numbers in Table 11 is the extremely high level of correspondence between periods of all the independent variables and the periods of social welfare effort (that is, R, the multiple correlation). Beyond this, some very remarkable differences exist among the nations that give us clues as to how to best characterize the histories of social welfare effort.

In Britain, when the other factors are taken into account, neither the growth of need nor resource constraint is terribly important. The explanation of the growth of the British welfare state from 1871 through 1965 will be best perceived by examining the dynamics of political struggle over the allocation of resources within the context of social mobilization-information and an autonomous pro-social welfare executive. In Italy, in contrast, social mobilization-information and central government insulation are less important, though similar to Britain in their direction of impact. In exploring the limited growth of welfare effort in Italy, the most important factors appear to be political struggle played out within the context of need and constrained resources.

The dominant characteristics of the history of state social welfare effort in Germany are very different from either Britain or Italy. Social mobilization-information has no separable impact, insulated central government is not supportive of social welfare effort and social welfare effort is, on the average, associated with periods of Right, not Left, strength. In Germany, as in Italy, resource constraints and the level of need are very important. No elements of the three forms of explanation fits the French case very well; that is, the periods of levels of social welfare effort do not correspond well to periods of levels in the independent variables.

It is useful, before attempting to form general conclusions, to examine an alternative approach to social welfare effort based on a measure of delay, or responsiveness to need. In this examination the reasons for the failure to successfully characterize the French case will become clearer.

6. THE PROBLEM OF UNMET DEMAND

Thus far we have been examining government social welfare expenditures as a proportion of the GNP. To operationalize "the growth of the welfare state"

in this manner tends to emphasize long-run trends. An alternative way of operationalizing the concept is to examine the mismatch between increasing "need" and the strength of governmental response. Both measures of demand and government social welfare effort developed earlier are expressed as proportions of the GNP. When the difference is taken between demand and supply and divided by supply, a number is generated that represents the number of years at current expenditure rates that it would take to satisfy demand. Social welfare effort may now be seen as the extent of unmet demand: Nations that have low levels of unmet demand are cases where the state is more adequately fulfilling a social welfare role.

This reconceptualization has a number of decided advantages over either the per capita social welfare expenditure approach or the social welfare as a share of GNP approach. First, it lends itself to a more dynamic stimulus-response way of thinking. Second, instead of being characterized as a simple long-run trend, as is social welfare effort, unmet need oscillates over time as either demand or government response occur at different rates. This decreases the problem of serial correlation significantly. In one sense, the growth in "welfare effort" could be considered a long-term evolutionary trend while the periods of unmet need can be considered as the swings or cycles about this evolutionary trend. There is no inherent reason why the causes of a trend should be the same as the causes of cycles and vice versa.

In Table 12, partial correlations of demand and slack resources with the size of unmet need are reported.

Table 12

Partial Correlations of Slack Resources and Demand on Unmet Need

	Britain	France	Germany	Italy
Demand Index	.33	-.48	-.23	-.45
Slack Index	-.01	-.65	-.43	-.60
Combined (R)	.34	.68	.61	.76

We see in this table that only in Britain has increasing need for social welfare outdistanced response. In the other three nations there is a strong tendency for high demand to occur in periods of low unmet need; that is, unmet need has decreased over time as social welfare effort has increased. At first glance, resource constraints correspond to lower levels of effort in France, Germany and Italy.

Again, the importance of resource constraint in generating unmet need is best evaluated taking the alternative explanations into account. In Tables 13 and 14, the indicators of political strength, information, and centralization are examined controlling for resource constraints.

Table 13

Partial Correlations of Left Strength, Right Strength, and Slack Resources on Unmet Need

	Britain	France	Germany	Italy
Left	-.21	-.49	-.55	-.19
Right	.36	.47	.47	-.03
Slack	.36	-.05	.20	-.68
Combined (R)	.37	.90	.89	.70

In Table 13, the importance of Right and Left strength with regard to the size of unmet need is strongly apparent, with the exception of Italy where resource constraints are again the predominant characteristic of the period, 1871-1965. It is important to note that when "welfare statism" is viewed as responsiveness to current need rather than general levels of social welfare effort, the German anomaly disappears. Despite the early establishment by rightist forces of a social welfare establishment in Germany, the responsiveness of this establishment to short-run swings in unmet need is strongly conditioned by the prevailing balance of power between Left and Right in the expected directions. The general nature of "welfare statism" in France also becomes clearer when the question is approached in this manner. While there is very little that can be said about the forces underlying the long-run trends in state social welfare activity in France (Table 11), the French government is quite responsive to short-run changes in political strength in the expected directions.

Table 14

Partial Correlations of Information and Centralization on Unmet Need

	Britain	France	Germany	Italy
Information	.12	-.57	-.34	-.29
Centralization	-.07	.08	.33	-.55
Slack Resources	-.06	.21	.12	.05
Combined (R)	.18	.73	.77	.80

In Table 14, we observe that periods of high levels of social mobilization are also periods of responsiveness to need in France, Germany, and Italy; resource constraints are not important in the shortrun response to

unmet need, and the strong central state promotes response in Italy and inhibits response in Germany.

Finally, in Table 15, the partial correlations of indicators of each of the three explanations with responsiveness to unmet need are presented.

Table 15

Partial Correlations of Independent Variables with Unmet Need

	Britain	France	Germany	Italy
Slack Resources	.10	-.13	-.02	.02
Left	-.34	-.48	-.48	-.18
Right	.47	.44	.48	-.24
Information	.32	.13	.17	-.27
Centralization	-.06	.04	-.05	-.60
Combined (R)	.51	.91	.89	.82

In terms of responsiveness to unmet need, resource constraints play little role, even in Italy and Britain. In Britain, France, and Germany, state responsiveness is strongly conditioned by the mass political power of leftist and rightist forces (the failure to include **communist** strength in Italy may explain the anomaly of that nation). Social mobilization-information and centralization tend to have little impact on the average on responsiveness except in Britain where mobilization-information is associated with less responsiveness (probably due to the post WWII period) and in Italy where strong central government remains positively associated with responsiveness.

7. CONCLUSION

This paper has explored several alternative characterizations of the history of state social welfare activity in France, Britain, Germany, and Italy over the entire period 1871-1965. The various results do not provide causal explanations, but do provide insights into both the differences in general historical patterns and the nature of the requirements for adequate causal theory. Two alternative conceptualizations of "welfare statism" have been explored, one focusing on the general level of state social welfare effort, the other on the responsiveness of the state to needs arising from old age, unemployment, and increasing standards of living.

"Welfare statism" appears to be most firmly established as an institutional pattern in Britain and Germany, as indicated by strength of the models exploring social welfare effort as a share of GNP. In France, state social welfare activity is not well associated with levels of the independent variables in the long-run. The French pattern appears to be better characterized by short-run responses to changing need, particularly as expressed in mass political action. In Italy, resource constraints have been important inhibitions to state social welfare activity throughout most of the period of study, with strong central government only very partially successful in overcoming these constraints.

The expansions of the welfare state in Britain and Germany have quite different roots. In Britain periods of mass Leftist strength are also periods of high social welfare activity; in Germany it is in periods of Rightist strength that social welfare effort is highest. In both nations, however, short-run positive responses occur correspondent to periods of high Leftist strength.

In summary, there are diverse historical patterns underlying the general level of social welfare effort, but short-run responsiveness to need are strongly governed by mass political strength of pro- and anti- social welfare interests. In Britain the institutionalization of the welfare state appears most closely connected with the mass strength of political forces; in Germany it is a rightist preemptory response; and, in France, an episodic response to political strength. In the short-run, regardless of the general structure of the state social welfare institutions, political strength is important in explaining responses to need.

Despite limitations of both data and techniques, the results presented here suggest some important guidelines for causal theory. Most importantly, the origins of "welfare statism" may display considerable historical specificity; the dynamics of state responsiveness to the need for social welfare may be more general and similar across nations and time. In both cases, level of effort and responsiveness, the importance of politics asserts itself. The nature of the interactions may however be quite complex among political mass strength, the structure of the state, and social welfare effort or responsiveness. Increasing need for state social welfare activity and resource constraints are of generally limited importance in these particular cases, once other factors are taken into account.

The growth of the welfare state in Western Europe has been one of the most basic transformations of socio-political structure in the past century. The origins, scope, and paths of development in each of the four nations represent historically unique patterns. Underlying these patterns, however, are common sets of general forces that have different degrees of importance in different nations at different points in time. As the complex interactions of these general forces are better understood, the reasons for both the commonalities and differences between specific histories will become clearer.

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