Attitudes toward Welfare Policy in Sweden Revisited

Steven Saxonberg

Introduction

With the emergence of easily available international databases, such as the International Social Survey Programme (ISSP), research on attitudes toward social policy has become increasingly popular in recent years. Nevertheless, this is still a rather new field and research in this area lags behind research on other aspects of social policy. Consequently, Hasenfeld and Rafterty (1989: 102) observed in 1989 that: "Surprisingly, there are few studies which attempt to identify the determinants of public opinion toward the welfare state." One decade later, the Swedish sociologist Jonas Edlund (1999: 341) still lamented the fact that "research within this field [of welfare state developments] has largely neglected the empirical examination of relationships between institutional characteristics and public preferences towards the welfare state."

In Sweden, Stefan Svallfors, has clearly become the most internationally renown researcher on welfare attitudes, having published numerous articles in international journals (for example, Svallfors 1993, 1995b, 1997) and having edited or co-edited several books in English dealing with the topic (for example, Svallfors 1995a, 1999a). In addition, he has published articles and books in Swedish (for example, Svallfors 1996, 1999b, 2000). There are several reasons for his international standing:

1. he has been one of the pioneers in taking a comparative approach to welfare attitudes;

2. he has been one of the first Swedes to publish internationally about Swedish welfare attitudes and he has been the most prolific publisher of international texts on Swedish welfare attitudes;

3. he has strongly contributed to the new tendency toward applying statistical methods to test what socioeconomic variables can explain attitudes; previously, much of the literature relied on descriptive statistics. He is also one of the first to emphasize the need of creating scales to measure welfare attitudes.

This article takes Svallfors' reserach as a starting point and will show that if one uses more sophisticated statistical methods, then even using the same data as Svallfors, one can achieve far better results. In some cases these results will also lead to significantly different conclusions. The article follows Svallfors' tradition of examining which socioeconomic factors can influence welfare at-

titudes; however, this article also goes one step farther by also investigating the link between welfare attitudes and voting.

Methodology and research questions

Perhaps since research on attitudes toward welfare is relatively new and under-developed field, the statistical sophistication of most studies on welfare attitudes has not been adequate. In fact, some of the best known studies have not used any kind of statistical tests at all and have instead relied on purely descriptive statistics or cross tabulations (see for example Coughlin 1980 and Taylor-Gooby 1985, 1995, Page and Shapiro 1992: ch 4, Nilsson 2000 and 2000b, Roller and Westle 1987).[1] Thus, Edlund is basically correct in pointing out a strong asymmetry here between the amount of research being done on social policies and on attitudes toward these policies.

Since Svallfors had clearly become the main researcher dealing with attitudes toward welfare in Sweden and he has played a leading role in the drive to apply statistical tests to hypotheses about the formation of welfare attitudes, this article takes Svallfors' publications as its starting point and show how his results can be greatly improved by using more sophisticated statistical methods. In fact, by using structural equation modeling (SEM) we not only get much better statistical results, the findings also bring into question some of Svallfors main conclusions about welfare attitudes in Sweden. In particular, Svallfors' study from 1999 will be analyzed using a different methodological approach. This study is the most interesting, because in contrast to his earlier studies (1993 and 1997) that deal with attitudes toward income inequality, this study deals more directly with attitudes toward welfare policies *in general*.

Svallfors (1999b) makes two interesting conclusions, which this study will question:

1. *Welfare attitudes are rather similar among West European countries. Therefore welfare attitudes cannot explain differences in welfare regimes, nor do welfare attitudes reflect such differences in regimes.* Instead differences in institutional arrangements probably account for the differences in welfare policies.

2. *Although social democratic welfare regimes are not unique in producing support for generous welfare policies, they are unique in creating a gender cleavage.*

to 1

Svallfors claims that welfare attitudes are rather similar among West European countries, but he reaches this conclusion by creating a one-dimensional scale of government intervention that shows little difference exists in the scores among West European countries. However, he creates his scale by using the Cronbach alpha test for reliability. This paper will use confirmatory factor analysis to test the hypothesis that support for equality exists as a separate dimension of welfare attitudes. Then it will discuss whether Swedes have different welfare attitudes than those living under non-social democratic welfare regimes, when a two-dimensional scale of welfare attitudes is used. Perhaps Swedes do not differ from continental Europeans in their support for welfare services, but they are more willing to pay the taxes that are necessary for financing the system. And perhaps Swedes have a more positive attitude toward redistribution in general, which makes it easier for Swedish governments to raise taxes for financing these programs. This would also indicate that political culture might influence policy making and thus partially call into question the dominance of institutional explanations of Swedish welfare policies. Of course, this is not to deny that institutions influence culture and some theorists see culture as part of institutions; nevertheless, the main discourse on social policy has pitted institutional explanations against cultural ones.

to 2

In Svallfors' (1999) model, gender is statistically significant, so he concludes that a gender cleavage really exists in Sweden, which does not exist under liberal and conservative welfare regimes. However, Svallfors does not control for public sector employment, as will be done in this study. In addition, he is only interested in whether variables are statistically significant and he never tries to construct parsimonious models that indicate which socioeconomic factors are the most important for explaining welfare attitudes. For example, in Svallfors' 1999 study (1999b: 109) the explained variance (R^2) for the six countries studied ranges from 4.2 % to 19.3%. In a study only of Sweden, Svallfors (1995b: 66–7) presents R^2s ranging from a mere 1.2 % to 13.7%. In 16 of 24 cases his models explain less than 5 % of the total variance and in 10 of 24 cases they explain less than 3%. Thus, by any standard, his models are not very successful. Of course, as with all statistical testing, one could question certain aspects of using the explained variance as an overall measurement of fit, but in traditional regression analysis this remains the main yardstick.

This study uses the same ISSP data as Svallfors, but applies SEM in order to get better results. SEM modeling forces the social scientist to pay much closer attention to overall model fit, so that in contrast to Svallfors' studies on welfare attitudes that only show which variables are statistically significant, the SEM model presented in this study will more clearly show which independent variables are the most important in influencing welfare attitudes. Thus, it might well turn out that even if gender is statistically significant, it does *not* play an important role in influencing welfare attitudes. Moreover, we might also find out that when a better scale is created for measuring welfare attitudes (using confirmatory factor analysis), gender is not statistically significant at all.

In contrast to traditional regression analysis, structural equation modeling places great emphasis on the overall model fit and achieving parsimonious models. Although one exact fit exists based on the probability of chi-square, it is more common to use various "closeness-of-fit" tests, since the chi-square

test is very sensitive to sample size and assumes normal distribution. The most common tests are the goodness of fit (GFI), the adjusted goodness of fit (AGFI), and root mean square error of approximation (RMSEA). The GFI measures the relative amount of variance and covariance between the estimated model and the population, while the AGFI adjusts the results for the number of degrees of freedom in the specified model. Meanwhile, the RMSEA takes into account the error of approximation in the population and expresses it per degrees of freedom. Normally one accepts models if both GFI and AGFI >.9, while RMSEA <.10, although some authors now favor using .08 as the cutoff point.[2] As will be seen below, the SEM models can meet the .10 limit for RMSEA when using the Erikson-Goldthorpe definition of class, but the .08 level can only be reached by using the Marxian definition of class.

The importance of voting

As already noted, Svallfors does not include voting in his studies, which is unfortunate, since one of the main hypotheses about universal welfare regimes is that social democratic parties introduce these policies in order to obtain widespread support for generous welfare states, which in turn makes it possible for them to gain the political support (i.e. votes) of the wider populace. In the social citizenship model, people receive welfare privileges based on being a citizen rather than on merit or ability to pay. Theoretically, this should make all citizens feel like benefactors from the welfare regime. Even though this theme has not been very prominent in research on welfare attitudes, some researchers have included voting in a manner that cannot really test the social citizenship hypothesis. Nilsson (2000a, 2000b) presents diagrams showing the attitudes to individual welfare issues among voters of the different political parties. Since he does not provide any type of regression analysis or statistical tests, we cannot know how strong the relationship is between voting and welfare attitudes and we cannot know whether the relationship is statistically significant.[3] Kumlin (2002) discusses the link between attitudes and left-right orientation, but this approach also limits itself to attitudes and leaves out political behavior. Those, who include voting in their models, usually include it as an independent variable, which *together with* socioeconomic variables determines welfare attitudes (i.e. Edlund 1999, 2000, Forma 1999, Forma and Kangas 1999, Knudsen 2001, Roller and Westle 1978). That is, their model is

EXPLANATORY VARIABLES (including voting) ➜ PRO-WELFARE ATTITUDES

Their model turns the social citizenship hypothesis upside down: it implies that citizens do not vote for social democratic and other leftist parties because they support universal welfare policies; rather, they support universal policies *because* they vote for leftist parties. In other words, *first* they decide to vote for leftist parties and *then* because they have already decided to vote for leftist parties they become supporters of universalist policies. If this hypothesis were true, it would mean that social democratic parties did not gain political hegemony in countries such as Sweden because of their social policies. It would

mean instead that because the population already supported social democratic parties, these parties did not have to worry about gaining support for their social policies and therefore, could implement the kinds of social policies that they wanted.

On the other hand, if the social citizenship hypothesis is true, then social democratic parties could obtain the political hegemony *because* they introduced universal policies, which obtained the support of wide portions of the masses and the supporters of these programs, then went on to vote for social democratic parties. In this case, the path model used in this article

EXPLANATORY VARIABLES ➜ PRO-WELFARE ATTITUDES ➜ VOTING

represents reality much more than the regression models that use voting (as an independent variable. Although not much has been written empirically about welfare attitudes and voting, much literature on the Swedish welfare state argues that Nordic social democratic parties gained political hegemony by introducing universalist policies, which through the notion of social citizenship convince large portions of the populace to support the welfare state, which in turn induces these citizens to vote for social democratic and other leftist parties (ie. Esping-Andersen 1985, Davidson 1989, Rothstein 1994 and Svensson 1994).

Data Base

The present article uses the 1996 ISSP survey "The Role of Government," which has 1238 randomly selected respondents from Sweden. One obvious advantage of using this data base is that it makes it possible to replicate Svallfors' (1999b) study by using the same data, but with a more sophisticated statistical methodology. Another advantage of using the ISSP data is that along with the World Value Surveys, the ISSP surveys are the most extensive in the world, having 26 countries participating. Thus, the results of this article can be tested on many more cases. A final advantage is that it is the most recent ISSP study that asks a wide range of questions on welfare policies. The other studies commonly used in welfare research (ISSP 1992 and 1999) deal with attitudes toward inequality, which while important, do not necessarily reflect attitudes to welfare policies in general.

All modeling in this article has been done on AMOS 5, because it is the most user-friendly computer program for SEM.[4] It also allows the results to be presented in path diagrams, so that the complicated maximum likelihood mathematics can be left of out this article and thus, the actual structural equations can be presented in a more reader-friendly manner. It should be noted here, however, that in contrast to traditional path analysis, the calculations are based on maximum likelihood statistics and the calculations of latent variables.

This article precedes by first considering the measurement model and whether Svallfors' one-dimensional scale of welfare attitudes is acceptable or whether it would be better to use a two-dimensional model, that would include equality as a separate dimension. If equality comprises a separate dimension

and if Swedes are more positive toward equality than continental Europeans, then many of Svallfors' findings come into question. The next step is to create full structural models to test the explanatory variables. First Svallfors' model will be tested with the same varaibles that he uses. Then his model will be compared to a structural model that uses the same independent variables, but includes a two-dimensional scale of welfare attitudes. Finally, the SEM models will be extended to include voting.

Measuring welfare attitudes

As already noted, Svallfors uses a one-dimensional scale to measure welfare attitudes in his study. More specifically, he uses an index for "government intervention," which includes questions about government responsibility for certain areas, but no questions about spending for these programs (see table 1). His index also includes a question about income redistribution and price controls, which he combines in the same scale. In his journal articles, Svallfors merely assumes that there is only one dimension of welfare attitudes, which is rather surprising, because he argued in a monograph that at least four dimensions of welfare attitudes exist.[5]

Svallfors' previous journal articles on welfare attitudes have all used one-dimensional scales of support for equality, which is logical, since he based them on 1992 and 1999 ISSP surveys, which are specifically devoted to attitudes on equality, and therefore, do not have more general questions about welfare policies. However, the 1996 ISSP data base, which Svallfors uses in his 1999b study, includes many questions for the two dimensions of support for welfare programs and support for income equality. Consequently, Svallfors should at least test whether both dimensions exist by using some form a multidimensional scaling. Theoretically, we could imagine cases in which respondents could very logically think that the government should have responsibility for certain services, without simultaneously demanding high degrees of income equality. For example, one could support publicly financed schools, without demanding progressive taxation or other distributive policies. It should be noted, that Svallfors is not alone in using a one-dimensional scale; in fact, it has rather become the norm to use one-dimensional scales created by applying Cronbach alpha's reliability test (see, for example, as Hansenfeld and Rafferty 1989; Edlund 1999 and 2000; and Sundström 1999).

One of Esping-Andersen's main theses (1990) is just that equality comprises a dimension of welfare policy. He notes, for example, that social democratic welfare regimes are not necessarily more generous than conservatist-corporate ones. The main difference is rather that conservative-corporatist welfare regimes aim to *conserve* inequalities, for example, by paying higher pensions to civil servants ("*Beamter*") than to other groups or by pursuing family policies that encourage women to stay at home and take care of the household. Meanwhile, social democratic policies promote equality. To be sure, Esping-Andersen writes about welfare *regimes* rather than welfare attitudes. Neverthe-

Table 1. Svallfors' Index of Government Intervention.

v44: *On the whole, do you think it should be or should not be the government's responsibility to provide decent housing for those who can't afford it?* (**RHOUSE**)
v38: *On the whole, do you think it should be or should not be the government's responsibility to provide health care for the sick?* (**RHEALTH**)
v39: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living for the old?* (**LVSOLD**)
v41: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living for the unemployed?* (**LIVUNEMP**)
v43: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living to university students from low-income families?* (**RESPSTU**)
v36: O*n the whole, do you think it should be or should not be the government's responsibility to provide a job for everyone who wants one?* (**RJOBS**)
v16: *"Agree strongly" or "Agree" that it is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes.* (**REDISTR**)
v18: *"strongly in favor of" or "in favor of" control of prices by law.* (**PRICECON**)

less, we can hypothesize that these policies would also influence public opinion. If governments carry out welfare policies that radically deviate from the opinions of the electorate, then we could hypothesize that many voters would turn to the oppositional parties during the next elections. In fact, it has been quite common for social scientists writing about welfare attitudes (including Svallfors) to take Esping-Andersen's typology and discussions about welfare regimes as the starting point of their studies, in order to see whether a connection does indeed exist between differences in regime types and differences in welfare attitudes (i.e. Andreß and Thorsten 2001).

Not only do theoretical reasons exist for testing for multidimensionality, empirical reasons exist as well. One study shows that support for income equality is much higher than average for social democratic Sweden and Norway, while support for welfare programs and increased spending on these programs is not higher in these two countries than in continental Europe (Aalberg 1998). As already noted, Svallfors himself in a previous book used exploratory factor analysis and concluded that welfare attitudes have four dimensions. However, his study did not include the kinds of questions that allowed for a differentiation between support for welfare programs and support for equality. In addition, he used exploratory factor analysis in the book, which is data-driven and makes it more difficult to test competing hypotheses. This present study, by contrast, uses confirmatory factor analysis which takes theoretical hypotheses as the starting point and then tests them (Jöreskog and Sörbom 1993: 22; see also Bollen 1989: ch. 7, Kline 1998: ch. 3 and Maruyama, 1998: ch. 7). However, it should be noted that even if the decision to test certain hypotheses about the dimensions of welfare attitudes, the actual decision about which indicators to include for each factor is data driven, as no particular theories exist as to why certain questions measure a latent attitude better than questions.

A second problem is that Svallfors' measurement of government intervention is questionable. Most of his questions deal with government responsibility and he omits all the questions dealing with government spending. However, it is not always clear what is meant by "responsibility." A liberal could answer that the government should have responsibility for pensions, but mean by "responsibility" that the government should set-up private pension funds and regulate them. Meanwhile, a social democrat could also answer that the government should have responsibility for pensions and mean that the pension funds should be completely financed and administrated by the state. Thus, it would make sense to complement the scale for government intervention by adding the ISSP questions about governmental spending, since in this pension example both liberals and social democrats might believe that the government should have responsibility for pensions, but the social democrat would be much more likely to want to increase governmental spending on pensions, while the liberal would favor private financing.

To be sure, questions about governmental spending are also problematical. Studies have claimed that the answers to these questions sometimes reflect current levels of spending more than general attitudes toward welfare. Respondents in countries undergoing heavy cutbacks in welfare programs are more likely to support increased spending than respondents in other countries (i.e. Taylor-Gooby 1995, Bonoli, George and Taylor-Gooby: 2000: 89p. and Bean and Papadakis 1998: 219). Although this creates problems in comparing attitudes between countries, *within* a particular country we would still expect market liberals to score lower on scales of government spending than social democratic and other leftist respondents. So these questions can give us important information.

Since neither questions on governmental responsibility nor governmental spending completely reflect the differences in opinions on welfare policies, it is possible that a combination of these kinds of questions can yield more reliable results. Again, this can be easily tested. If both types of questions scale well together, then it is better to combine them. In general, despite the drawbacks of the questions on responsibility and on spending, we would still expect social democrats to score higher on both kinds of questions than liberals. If these two types of questions do not scale well together, then they reflect different dimensions, which again could be reason to use multidimensional scaling methods.

Before formally testing whether Svallfors is correct in using a one-dimensional measurement scale of welfare attitudes or whether Esping-Andersen is correct in hypothesizing an equality dimension to welfare, this article presents comparative descriptive statistics to show at a more intuitive level whether we have reason to expect a separate equality dimension to exist. Thus, the aggregate answers to questions on welfare in social democratic Sweden will be compared to Christian democratic Germany, "truly liberal" USA and "radically liberal" Great Britain. For Germany only the West German correspondents are included, since the East German respondents are influenced by the years of communist rule and post-communist transformation and thus, less likely to

Table 2. Support for Welfare Polices.

	Sweden (n=1238)	Germany (West) (n=2361)	USA (n=1332)	GB (989)
1. INCREASED GOVERNMENT SPENDING				
v31: % agreeing that: *the government should spend "much more" or "more" on unemployment benefits.* (**spunemp**)	**42.7%**	28.8%	28.3%	35.9%
v30: % agreeing that: *the government should spend "much more" or "more" on old age pensions.* (**sppension**)	56.9%	44.4%	50.8%	80.0%
v28: % agreeing that: *the government should spend "much more" or "more" on education.* (**spedu**)	58.8%	51.2%	77.3%	84.5%
v26: % agreeing that: *the government should spend "much more" or "more" on health.* (**sphealth**)	76.6%	53.8%	67.5%	91.5%
2. GOVERNMENTAL RESPONSIBILITY				
v20: % *"strongly in favor of"* or *"in favor of"* government financing of projects to create new jobs. (**job**)	69.3%	79.0%	73.7%	85.3%
v44: *On the whole, do you think it should be or should not be the government's responsibility to provide decent housing for those who can't afford it?* % answering "definitely should be" or "probably should be." (**RHOUSE**)	81.8%	77.9%	67%	88.6%
v38: *On the whole, do you think it should be or should not be the government's responsibility to provide health care for the sick?* % answering "definitely should be" or "probably should be." (**RHEALTH**)	96.2%	96.6%	84.6%	98.6
v39: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living for the old?* % answering "definitely should be" or "probably should be." (**LVSOLD**)	97.7%	96%	86.7%	98.2%
v41: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living for the unemployed?* % answering "definitely should be" or "probably should be." (**LIVUNEMP**)	**90.3%**	80.4%	47.7%	78.7%
v43: *On the whole, do you think it should be or should not be the government's responsibility to provide a decent standard of living to university students from low-income families?* % answering "definitely should be" or "probably should be." (**RESPSTU**)	79.1%	87%	85.3%	90.1%
v36: *On the whole, do you think it should be or should not be the government's responsibility to provide a job for everyone who wants one?* % answering "definitely should be" or "probably should be." (**RJOBS**)	65.1%	74.6%	39.4%	69.4%
3. INCOME EQUALITY				
v16: % *"Agree strongly"* or *"Agree"* that it is the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes. (**REDISTR**)	**59.6%**	49.4%	32.6%	54.0%
v17: % *"strongly in favor of"* or *"in favor of"* control of wages by law. (**wagecon**)	28.3%	27.2%	28.2%	38.3%
v18: % *"strongly in favor of"* or *"in favor of"* control of prices by law. (**PRICECON**)	**58%**	50.4%	34.9%	52.0%
v19: % *"strongly against"* or *"against"* cuts in government spending (**cuts**)	20.4%	4.2%	5.9%	26.8%
v57: % *describing taxes in respondent's country as generally being "too low or "much too low" for those with*	**62.4%**	53.0%	38.8%	47.6%

Note: Those variables used in Svallfors (1999b) are written in capital letters, while those added in the present study are not. For example, the variable job was not used by Svallfors, but RJOBS was. For those cases in which Swedes are the most positive toward welfare polices, their results are printed in bold.

have conservative attitudes (see Andreß and Heien 2001). By bringing in both Great Britian and the USA, this article also follows Castles and Mitchell's (1992, 1993) distinction between "truly liberal" welfare regimes, and "radically liberal" welfare regimes. The main distinction is that radically liberal regimes complement low taxation and low levels of social spending with equality of benefit levels and regulation of wages and working conditions. Since Svallfors (1997, 1999b) has found that respondents from radically liberal welfare regimes are more positive toward welfare than those coming from truly liberal ones, this article maintains this distinction. If the Esping-Andersen hypothesis is correct, we would expect respondents from social democratic Sweden to be more positive than those from conservative Germany on issues of equality, but not necessarily on issues of government programs. Since Svallfors only includes 8 questions in this scale and only two of them (on redistribution and price control) deal with equality, it is difficult to make any generalizations from his results. Thus, all the relevant questions from the 1996 ISSP survey are included in table 2. In addition, although Svallfors excludes questions about spending levels from his scale, as already noted, such questions can give us useful knowledge and, therefore, are also included in table 2.

We can begin investigating whether Svallfors' one-dimensional model is more fruitful or a two-dimensional model that combines governmental responsibility and spending into one dimension (BIG PUBLIC SECTOR) and questions about taxes, price controls and redistribution into another dimension (EQUALITY). After examining the comparative descriptive statistics, the one-dimensional and two-dimensional models will be formally tested using confirmatory factor analysis.

Table 2 shows that Swedes are the most positive of all respondents toward increasing public spending in only one area: unemployment benefits (v31). Similarly, they are more supportive of government responsibility in one area: providing a decent living standard for the unemployed (v41). The greater concern for unemployment issues could reflect the deep economic crisis of that period or it could reflect a relative lack of stigmatization for the worse off in a country with a universalist welfare system. In general, though, social democratic Swedes do not distinguish themselves from their "radically" liberal or conservative European neighbors on support for welfare programs, although the European respondents in general do distinguish themselves from those living in market-liberal America.

However, Swedes really do have more "social democratic" attitudes than the other countries on the issue of equality. Support for income redistribution is much higher in Sweden than in western Germany or the USA. Even the 5.6 % difference between Swedes and the British was substantial (v16). Swedes are also more supportive of price controls than West Germans or the British and much more than Americans (v18). Similarly, Swedes are more in favor of taxing the wealthy than any other group (v57) and much more strongly against cuts in government spending than West Germans and Americans (v19). However, on this issue the anti-Thatcher backlash makes its presence felt, as British respondents are even more negative to cutbacks than Swedes. The dif-
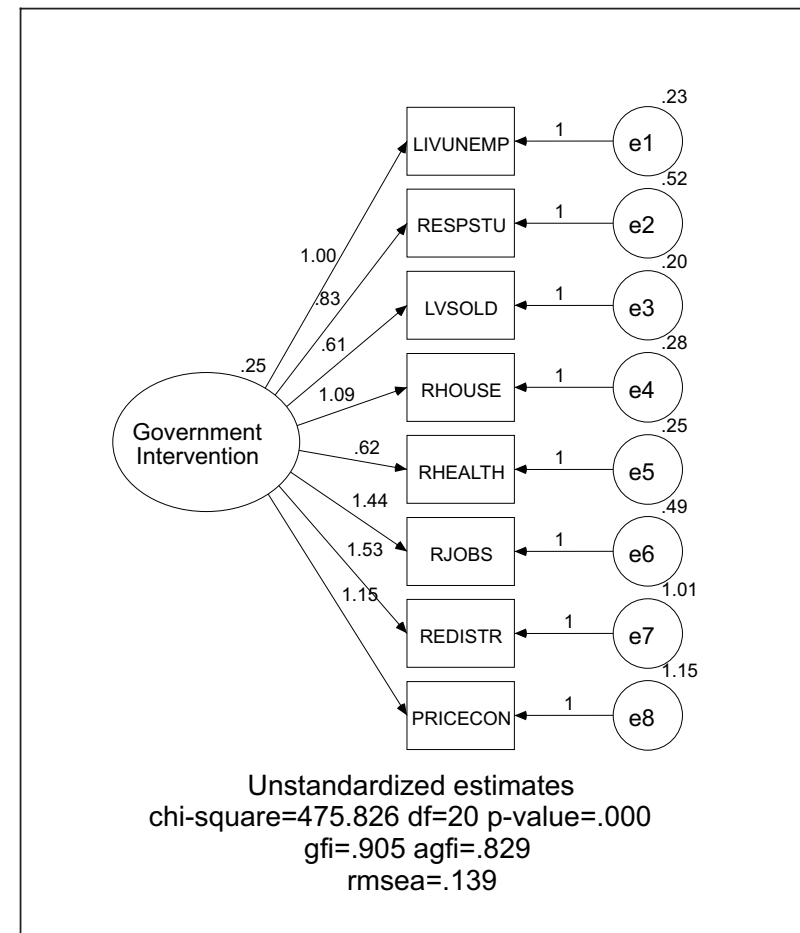

Diagram 1. Confirmatory factor analysis using Svallfors' model.

ferences in means are significant at the .001 level for all cases. This means that in 3 of 5 questions dealing with equality, Swedes are the most supportive of measures that would increase equality, while in another case they were in second place, behind Great Britain, but well before conservative Germany and the "truly liberal" USA. In one other case, (wage controls) they are also in second place, although the differences to America and Germany are very small.

The fact that Swedes are more supportive of measures that increase equality than respondents from other countries, but not more supportive of social programs, indicates that equality might exist as a second dimension to welfare attitudes, which gives tentative support to Esping-Andersen's (1990) argument that social democratic welfare regimes differ from conservative-corpo-

ratist welfare states more in the area of equality, rather than in spending levels. Thus, these descriptive statistics give us reason for hypothesizing that a two-dimensional scale can measure welfare attitudes better than Svallfors' one-dimensional scale.

These results also contradict Aalberg's (1998) claim that support for income equality is indeed higher in social democratic Sweden and Norway than in most other countries, but support for governmental measures that could eradicate income inequality are only average for the industrialized world. The ISSP data base used in this present study only has questions about governmental policies that could influence income equality, so nothing can be said about attitudes toward justifiable incomes. Still, this study shows that Swedes are in fact more favorable than other respondents toward *policies* that could reduce income equality.

Confirmatory factor analysis confirms the hypothesis that equality provides a second dimension of welfare attitudes. As Diagram 1 shows, when using the *exact same data set* and the *exact same variables* as Svallfors (1999b), his one-dimensional scale of government intervention does not meet basic minimal criteria for closeness of fit.[6] Although the GFI index is above the acceptable level of .9, the AGFI index is below the necessary .9-level and the RMSEA index is above the necessary .1 level, making these results unacceptable. So even though Svallfors presents a good Cronbach alpha score of .85 in his study (1999b:102), his measurement model fails to pass the more stringent closeness of fit tests used in confirmatory factor analysis and structural equation modeling.

In contrast, diagram 2 shows that when questions are government spending are added, a two-dimensional scale can pass the closeness-of-fit tests by distinguishing between support for a welfare programs (BIG PUBLIC SECTOR) and support for income equality (EQUALITY), although some of the variables from both dimensions must be eliminated (v17, v19, v26, v28, v38, v39, v43 and v58). It is not necessary here to speculate on why certain questions do not scale well; what is important is that the substantive results support the two-dimensional measurement model and refute the more common one-dimensional mode.

Here is it also very interesting to observe that on the issue of income equality, only those three questions scaled well in which Swedes were more positive than the respondents from Germany, Great Britain and the USA (v16, v18, v57). The two questions in which Swedes came in a close second place did not scale well and had to be removed (v 17, v19). In other words, those two questions did not really measure support for equality. These findings have important consequences for further research, as they indicate that Svallfors is wrong in concluding that welfare attitudes are similar among west European countries. Support for programs and services are relatively similar, but support for *financing* these programs differs, as does support for *redistribution* as a goal in itself.

From an institutional perspective, one could interpret these findings as follows: the greater support for high taxes in Sweden implies that universal wel-
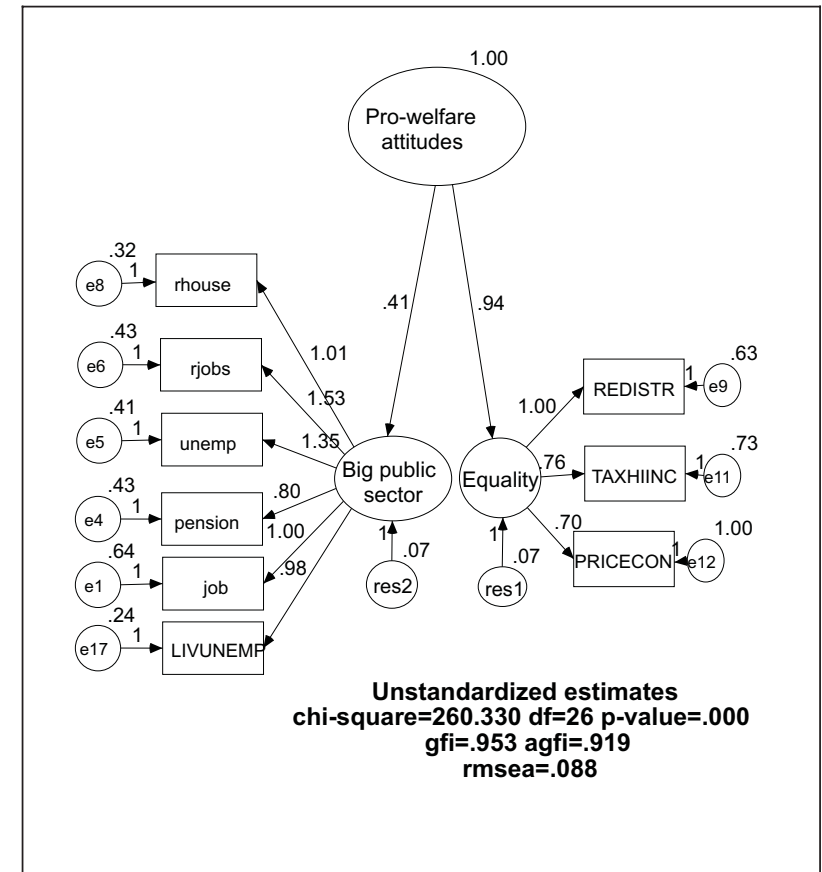

Diagram 2. Multideimensional model second order CFA.

fare policies do in fact create an atmosphere of social citizenship. This atmosphere makes citizens more prepared to pay high taxes in order to finance programs, as they understand that they too will benefit from them. Citizens living under other types of welfare regimes might like receiving welfare benefits, but since many of the citizens do not presently receive such benefits they are less certain that they will receive benefits and therefore are less willing to pay taxes for financing them.

Another possibility is that institutionalists such as Steinmo (1993) and Immergut (1992) have been too quick in dismissing cultural explanations of welfare regimes. For not only are Swedes more likely than West Germans, British and Americans to support higher taxes, *they are also more willing to support redistribution as a goal in itself*. This greater support for redistribution might help explain why social democratic governments can more easily win elections in Sweden and why Swedes are more willing to pay higher taxes once the social

democrats come to power. This in turn implies that an egalitarian political culture in Sweden could partially account for the emergence of the universalist welfare state in Sweden. To be sure, many institutionalists consider culture to be an institution, but in the discourse on social policy it has common to pit cultural arguments about "cultures of equality" etc. against institutional arguments that emphasize political structures, such as electoral systems. Of course, this present study cannot provide any conclusive data on the issue any more than Svallfors' study can provide conclusive data that institutions are more important than attitudes in shaping welfare policies. Still, the present results give reason to question some previous results about the role of attitudes and political culture and should give an impetus to further study on the matter.

Finally, it should be noted that in applying SEM models, including for confirmatory factor analysis, it is possible to allow for covariation among the variables. This should be used sparingly and theoretical reasons should exist for adding covariation paths. Without going into technical details here it suffices to note that both the one-dimensional and two-dimensional factor models improve when adding covariation paths, but the substantive results remain the same: the two-dimensional model performs much better. The models with covariation are rejected here, since no theoretical reasons exist to expect covariation among the indicators of the latent variables. Adding covariation among them merely makes the models more complicated without changing the substantive results. It should also be noted that by eliminating several factor indicators, the two dimensional model can pass the more stringent exact-fit chi-square test without having any covariation paths, while the one-dimensional model fails to pass the chi-square test. It is not necessary to go into such detail here, however, because even a visual examination of the descriptive statistics in table 2 supports the claim that EQUALITY provides a different dimension of welfare attitudes than does support for BIG GOVERNMENT. The table clearly shows that Swedes do not differ from other respondents on the issue of supporting BIG GOVERNMENT, but they *do* differ in their support for EQUALITY.

Explaining welfare attitudes

Now that a better measurement model has been created for measuring attitudes toward welfare, the next step is to create a model that can explain these attitudes. The first model will be a reproduction of Svallfors (1999b) using the same independent variables, but using the Maximum Likelihood form of estimation in the SEM program AMOS. It is already general accepted that maximum likelihood provides a superior form of estimation than traditional OLS (ordinary least squares). The other advantage of using AMOS is that we can still use the SEM model fit criteria, to see whether Svallfors' model passes the closeness-of-fit tests. It should be noted already here that in his 1999 study, Svallfors only uses three independent variables: class, gender and receiving welfare payments. However, in previous studies (1993, 1995b, 1997) he also includes

income and public sector employment. It turns out that if these variables are added the explained variance of the model increases and gender no longer becomes statistically significant even in the simple regression analysis. Since the addition of the "old" Svallfors variables gives better results, they will be included in all of the models after first reproducing the results of Svallfors' study.

1. Still a Class Society?

Authors, such as Esping-Andersen (1990), Korpi (1981), Ginsburg (1992) and Svallfors (1997: 290) have claimed to various degrees that class struggles in Western Europe have basically shifted from confrontations over ownership of the means of production to political battles over welfare policies.[7] In Esping-Andersen's view, the main goal of Marxism is not control over the means of production, but rather the decommodification of labor. That is, welfare policies should be created that are so generous that workers do not need to sell their labor power to capitalists in order to survive. Consequently, countries with strong leftwing political movements and long traditions leftwing rule tend to have more generous welfare policies.

In contrast to the view of welfare politics as another dimension of class struggle, other theorists have claimed that we are entering into a post-materialist era, where issues such as the environment and gender relations have replaced the class-based politics of the past (cf Inglehart 1997). Furthermore, the "old," class-based social movements are being replaced by "new" social movements, where alternative lifestyles and identity formation is more important than obtaining political power (Cohen 1985). In this post-modernist era, even social policies have become more mixed and pluralist and welfare policies no longer follow class politics (Mishra 1993). Election surveys also show that class voting has been somewhat on the decline; however, it is still strong in Sweden. Blue collar workers are still much more likely to vote for the Social Democrats and Leftist Party than the non-socialist parties (Holmberg 2000, Gilljam and Holmberg 1995).

Svallfors uses the Erikson-Goldthorpe definition of class, and divides class into 6 groups (non-manual labor, skilled labor, routine non-manual labor, service class 2, service class 1 and self-employed), while Ahn's (2000) Marxian classification has three divisions (worker, professional and "bourgeoisie").[8] Thus, the Marxian classification pays closer attention to the respondents' relationship to the means of production then the Erikson-Goldthorpe, which is more of a stratification system. An advantage of the Marxian classification is that it allows the latent variable CLASS to include a combination of the respondent's and his/her spouse's occupation (see diagram 5). Svallfors' method for coding class – which follows the Erikson-Goldthorpe technique – does not allow for this possibility, because when the class of the respondent is missing, it uses the class of the spouse. Consequently, the data for the class of the respondent and that of his/her spouse are in many cases the same.

Since Svallfors uses the Erikson-Goldthorpe definition of class, that will be the starting point of this study. However, these results will then be briefly compared to the results achieved using a Marxian definition.

2. Gender

Feminist scholars have pointed out that welfare policies affect women more than men. Since women are the traditional providers of welfare, social policies, such as the provision of daycare and elderly care relieve women of their household duties and allow them to enter the workforce (see, for example, the articles in Sainsbury 1994 and Lewis 1993). For the same reasons, cutbacks in these types of programs affect women more then men, since they force women to leave the workforce in order to take care of children or the elderly. At the same time, women are doubly dependent on the welfare state, since they are much more likely than men to work in the public sector (Sainsbury 1996, Hernes 1987). Esping-Andersen (1990) shows that social democratic welfare regimes have particularly segregated women to the labor force, and therefore, he predicts that these welfare regimes are particularly susceptible to tensions between publicly employed women and privately employed men. Svallfors (1999b) concludes that gender is indeed more important for social democratic countries than others.

It is interesting to note that Svallfors (1997) finds that gender is important even when controlling for public sector employment, which indicates that woman are not only more positive toward social policies than men, because they are more likely to work in the public sector. This indicates that women are also more likely than men to support the welfare state either for cultural reasons or because the welfare state relieves them of their household duties. Thus, although Svallfors does not make the argument implicit, the fact that gender is more important for social democratic regimes than others even when controlling for public sector employment, would indicate that social democratic regimes induce greater female support for welfare policies because they go farther than other welfare regimes in alleviating women from their household duties.

3. Public Sector Employment

As already noted, although several studies have shown that women tend to be more positive toward welfare policies than men, it is not clear whether women are more positive toward welfare policies because they are more likely to work in the public sector or for other reasons. For example, even women who work in the private sector might be more positive toward welfare policies because of cultural reasons or practical reasons, such as the opportunity to use public services to relieve them from household. Again, since previous studies have not found that public sector employment is more important for explaining attitudes under social democratic regimes than under other types of regimes, then a significant correlation between public sector employment and welfare attitudes does not necessarily support Esping-Andersen's claim that social de-

mocratic welfare regimes differ from others in that they create gender divisions. Esping-Andersen's claim (and Svallfors' interpretation of this claim) could only be confirmed in this study if both gender and public sector employment become significant explainers of welfare attitudes.

It should also be noted that public sector employment can influence male attitudes just as much as female attitudes, for the very same reason that the male employees too are dependent on the public sector for their employment. In addition, public sector employees might develop "bonds of sympathy and solidarity" with their clients (Lafferty paraphrased by Svallfors 1997: 290).

4. Receiver

Svallfors also uses the variable RECEIVER, to denote whether or not one receives welfare benefits. Pettersen (2001: 29) labels this the "demand theory" and notes that "it is easiest to support those programmes that people hope to use themselves, or where there is a possibility of such use." Hasenfeld and Raferty (1989) and Cook and Barrett (1992) label this the self-interest hypothesis. Unfortunately, most surveys do not provide much data about whether one actually receives benefits. Thus, this article follows Svallfors (1999b) and Ahn (2000) in considering unemployed and pensioners recipients, since in Sweden the vast majority of unemployed receive some kind of support (unemployment insurance or social help) and all permanent residents are entitled to pension benefits (even if the actual level of benefits is influenced by previous income).

5. Income

Finally, another common explanation is income, although different researchers attribute different meanings to this variable. One argument is that those with higher incomes are more negative toward welfare policies, because they would *potentially* have to pay higher taxes to finance these policies (Ahn 2000). Although the wealthy can often find loopholes to avoid paying taxes, the potential *threat* of high taxes can influence the attitudes of the wealthy. Pettersen (2001: 29) terms this "burdened taxpayers". Another possible interpretation, however, is that those with higher incomes are more likely to have middle-class life styles, including more individualistic attitudes (Andersen et al 1999: 239).

Results of Previous Studies

Previous studies on Sweden, Sweden in a comparative perspective or Norway in a comparative perspective (Ahn 2000, Edlund 1999, 2000, Svallfors 1993, 1997), basically show that these variables are statistically significant. The main exception is working in the public sector, which was not significant for Sweden in Svallfors' 1993 and 1997 studies. Receiving benefits has always been a significant variable for social democratic countries in his studies, but have been

insignificant for liberal countries in his 1997 study and for conservative countries in his 1999b study.

Several others studies have supported most of Svallfors' hypotheses, but often find that one of the variables is insignificant for Sweden or other Scandinavian countries. For example, Knudsen's (2001) study of attitudes toward income equality in Norway, gender is not significant if controlled for voting and religious sympathies. Andreß and Heien (2001) find that in Norway being pensioned is not significant, although being unemployed is significant. Thus, they confirm half of the benefit hypothesis, while rejecting the other half. Blomberg, Kroll, Souminen and Helenius (1996: 67) find that in Finland class, gender and income are statistically significant for explaining opposition to cutbacks to some programs but not others. In contrast, Forma and Kangas (1999) find that class cannot explain welfare attitudes in Finland. Pettersen (2001) finds that in Norway being publicly employed is not significant. Paradakis and Bean's (1993: 238–9) six-country study does not include any Scandinavian social democratic countries and shows mixed results. Class, being a pensioner or being unemployed are only significant for two countries, gender for three and income is not significant for any country in explaining attitudes toward statutory intervention in social welfare. Their results are also mixed for explaining attitudes toward government spending on social welfare. In their 1998 comparative article using data from the ISSP 1990 survey, they find that in social democratic Norway gender is significant, but not being a pensioner or unemployed (Bean and Papadakis 1998: 225).

Nevertheless, even if not all of these hypotheses have been verified in every study, they have all been verified for social democratic countries in several previous studies and therefore, are worth testing in this present study. Some of the studies mentioned have also included other variables, but since a major task of this study is to show how Svallfors' results for Sweden could be changed when superior methodological techniques are used additional hypotheses used by other authors are excluded from this study. It should be emphasized here, however, that with the 1996 ISSP data base even when controlling for other commonly used variables, such as age and education, the main substantive results for Sweden remain the same.

Model testing

Now the focus of this article is on developing models that can explain welfare attitudes. First, Svallfors' study will be reproduced using the same variables and measurement model. Then SEM models will be developed, to see whether they can explain welfare attitudes better than Svallfors' model (see diagram 3). The first SEM model uses the same independent variables as in Svallfors' model (see diagram 4). After converting Svallfors' model into a SEM model that uses a two-dimensional for measuring welfare attitudes, this article ascertains whether the model can be improved by using a Marxian conception of class.
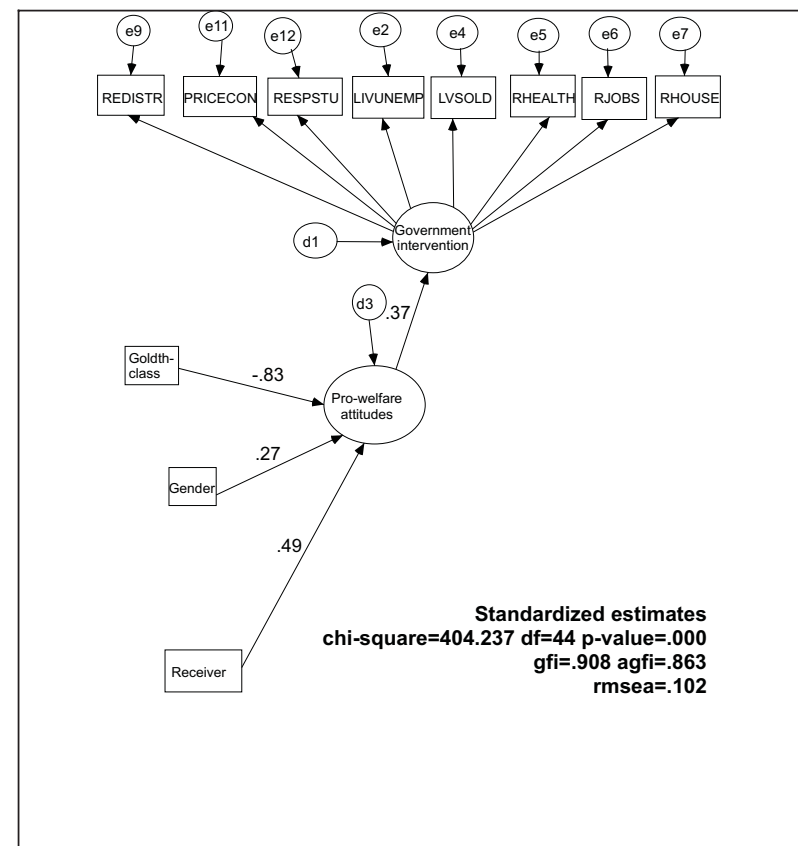
Diagram 3. Svallfors' 1999 model.

Finally, the SEM models will be expanded to include voting. In contrast to most previous studies, this study uses voting as a dependent rather than independent variable. This makes it possible to ascertain whether respondents who have pro-welfare *attitudes* are also willing to translate their attitudes into actions by voting for leftist parties, which are more likely to *support* these policies. More specifically, LEFTIST VOTING measures voting for the Leftist Party (*Vänsterpartiet*) or Social Democratic Party (*Socialdemokratiska arbetarepartiet*) as a dependent variable, which in turn is dependent on the intermediary variable (PRO-WELFARE ATTITUDES).[9]

a) Svallfors' Model

As can be seen in diagram 3 and table 3 (column 1), Svallfors' (1999b) model fails to meet any of the model fit measures except for the GFI (being .9). When the GFI is adjusted (AGFI) to take into account the number of variables, the

Table 3: Regression Models of Welfare Attitudes in Sweden Using Svallfors' Measurement Model for Welfare Attitudes. (standardized coefficients in parentheses)

INDEPENDENT VARIABLES EXPLAINING PRO-WELFARE ATTITUDES	1. Svallfors' 1999 Regression Model (Diagram 3)	2. Svallfors' 1999 statistics including independent variables from Svallfors 1993, 1995 and 1997 studies	3. Svallfors 1999 statistics including statistically significant variables from his previous studies
a) Class according to the Erikson-Goldthrope definition	-.09 *** (-.83)	-.07*** (-.64)	-.07 *** (-.64)
b) gender (female=1)	.10*** (.27)	not significant	
c) public employee (yes=1)		.10** (.27)	.10** (.27)
d) receiver of welfare (pensioned or unemployed =1)	.21*** (.49)	.15 *** (.33)	.15*** (.33)
e) income (level 1-8)		-.07*** (-.64)	-.07*** (-.64)
Test Statistics			
chi-square	615.660	1135.900	873.661
df	44	65	54
p-value	.000	.000	.000
GFI (should be >.9)	.908	.866	.888
AGFI (should be >.9)	.863	.813	.838
RMSEA (should be < .10)	.104	.118	.111
Explained variance of PRO-WELFARE ATTITUDES	.14	.16	.16

**= significant at the .01 level. *= .05 significant at the level. All other coefficients are significant at the .001 level unless labeled insignificant.

model fails the test (since AGFI <.9). The RMSEA is also unacceptable being greater than .10. Meanwhile, the independent variables can only explain 14 % of the variance in PRO-WELFARE ATTITUDES.[10]

As already noted, in previous studies, Svallfors also includes PUBLIC EMPLOYMENT and INCOME as variables. If these two variables are added, GENDER no longer becomes significant (see table 3, model 2). Thus, Swedish women are more likely to be positive toward welfare policies mainly because they are more likely to work in the public sector. This also brings into question Svallfors' and Esping-Andersen's claim that social democratic welfare regimes induce a new conflict between the sexes. It is true that social democratic regimes cause some amount of segregation in the labor market, since women are more likely than men to work in the public sector. However, it turns out that working in the public sector itself contributes to a positive view of welfare, rather than being a woman. Yet, as already noted, previous studies have not shown that PUBLIC EMPLOYMENT is any more important for social democratic regimes than for any other.

Thus, this study does not support the claim that gender divisions provide a special characteristic of social democratic welfare states.

Table 3 model 3 shows, moreover, that even when GENDER is eliminated, the regression model does not meet closeness of fit criteria. In fact, although the details are not reported here, no simple regression models using Svallfors' one-dimensional measurement of WELFARE ATTITUDES meet closeness-of-fit criteria, regardless of which combination of these five independent variables one chooses. We can conclude that Svallfors' model does not adequately account for welfare attitudes and that his conclusions about gender influencing welfare attitudes in Sweden does not hold up if one controls for public sector employment.

b) The Full Structural Model

Diagram 4 and table 4 (model 1) show once again that even when a two-dimensional measurement model is used for PRO-WELFARE ATTITUDES, the model fails to meet model fit requirements if all of the independent variables are included. The GFI index is acceptable being above .9 and RMSEA is below .1, but the AGFI index is below .9 and gender is still insignificant. In other words, we again have evidence that women are more likely than men to support welfare policies specifically because they are more likely than men to be employed in the public sector and not for any other reasons associated with gender. Once more, this refutes the argument that social democratic welfare regimes induce an extra cleavage between the sexes.

When looking at the standardized coefficients of the full model, it also becomes clear that although RECEIVER is statistically significant, it has very little explanatory value. Table 4 (model 2) shows, however, that once GENDER and RECEIVER are removed, the modified SEM model meets all of the closeness of fit criteria. Tables 3 and 4 also show that the SEM models (with and without RECEIVER and GENDER) explain much more of the variance in PRO-WELFARE ATTITUDES than Svallfors' regression model. In both SEM models (table 4 models 1 and 2), the explained variance of PRO-WELFARE ATTITUDES is 24 %, compared to 14 % in Svallfors' original model from his 1999 study). Svallfors' model can be slightly improved by eliminating GENDER and adding PUBLIC EMPLOYMENT and RECEIVER (table 3, model 3). However, Svallfors' regression model still only explains 16 % of the variance in PRO-WELFARE ATTITUDES, compared to 24 % for the SEM models (table 4, models 1 and 2).

Technically one cannot compare R²s, since Svallfors uses a different measurement model for PRO-WELFARE ATTITUDES, but the fact that a better measurement model combined with more sophisticated modeling can explain a much higher degree of variance in PRO-WELFARE ATTITUDES gives a further indication that the SEM model is superior to Svallfors'. By itself, one might criticize this comparison of R²s, but again we have the additional evidence that:
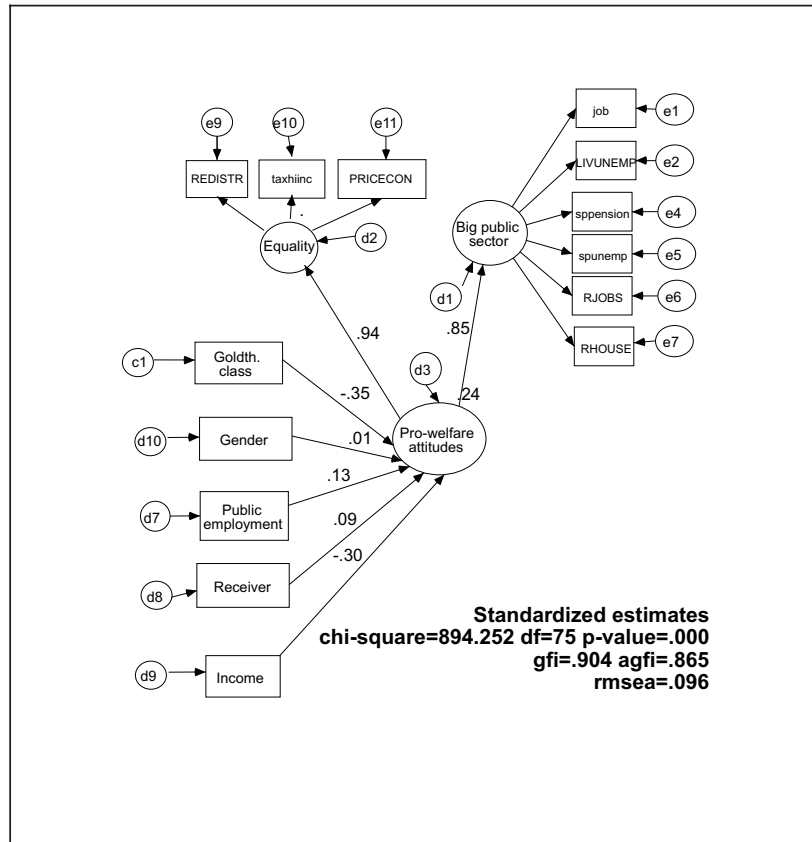
Diagram 4. Full struktural model using Erikson-Goldthorpe.

i) the SEM model meets closeness-of-fit criteria, but Svallfors' model does not;

ii) it is also a stronger model, since it explains more of the variance than Svallfors' model

iii) it is more parsimonious, since it shows that we can achieve a bitter fit and explain more of the variance of welfare attitudes even though we have eliminated two independent variables (GENDER and RECEIVER)

As already noted, we also have the important substantive conclusions that in contrary to Svallfors' findings, social democratic welfare regimes do not differ from other regimes in that they create a cliff between male and female attitudes. Instead, Swedes distinguish themselves in their willingness to pay taxes to finance these programs and the general support for equality as a goal in itself, rather than a means of achieving other goals.

Table 4: Structural Models of Support for Welfare in Sweden (standardized coefficients in parentheses).

	1. Full SEM model using Erikson-Goldthrope (Diagram 4)	2. Close-fit SEM model using Erikson-Goldthrope	3. Close-fit SEM model using Marx (Diagram 5)	4. Close-fit SEM model using Erikson-Goldthrope including voting (Diagram 6)	5. Close-fit SEM model using Marx including voting
Indicators of CLASS					
a) own class (Goldthorpe definition for models 1, 2, 4 and Marxian definition for models 3 & 5)	fixed	fixed	1.30*** (.55)	fixed	1.36*** (.56)
b) spouse's class (Marxian definition 1–3)			fixed (.48)		fixed (.47)
Determinants of PRO-WELFARE ATTITUDES					
a) class	-.18*** (-.35)	-.18 *** (-.35)	1.79*** (-.54)	-.20 *** (-.37)	-2.03*** (-.58)
b) public employment (job in public sector =1)	.23*** (.13)	.22*** (.12)	.21*** (.12)	.23*** (.13)	.22*** (.12)
c) receiver (pensioned or unemployed =1)	.18*** (.09)		excluded [+]		
d) income (1-8)	-.16*** (-.30)	-.17*** (-.32)	-.19*** (-.37)	-.15 *** (-.27)	-.18*** (-.33)
e) gender (female=1)	not sign.		excluded[+]		
Determinants of LEFTIST VOTING					
a) pro-welfare attitudes (second order factor measured in EQUALITY and BIG GOVERNMENT)				.30*** (.55)	.30*** (.56)
Test Statistics					
Chi-square	894.252	519.777	452.133	600.537	566.987
Df	75	52	62	63	74
p-value	.000	.000	.000	.000	.000
GFI (should be >.9)	.904	.935	.945	.931	.939
AGFI (should be >.9)	.865	.903	.920	.900	.913
RMSEA (should be <.10)	.096	.087	.073	.086	.075
Explained variance of PRO-WELFARE ATTITUDES	.24	.24	.44	.23	.46

+Note: GENDER turns out to be insignificant in the full model using a Marxian definition of class, as it was in the Svallfors and full SEM model using the Erikson-Goldthrope definition of class, so it has been eliminated here. RECEIVER is excluded, because it makes for a better model fit and because it had to be excluded in the Erikson-Goldthorpe model. ***=significant at the .001 level. **= significant at the .01 level. *= significant at the .05 level.

Although space does not allow for a thorough analysis of the implications of different views of class, it is still important to note that when using the Marxian definition of class (in which CLASS is measured as a latent variable that inclu-

des the economic class of both the respondent and his/her spouse), the SEM model performs much better than when using the Erikson-Goldthorpe. As table 4 (model 3) shows, in the best-fitting Marxian model CLASS is able to explain 44 % of the variance in PRO-WELFARE ATTITUDES compared to 24 % for the Erikson-Goldthorpe model (model 2). In addition, all of the test statistics improve and the RMSEA score goes under .08, which according to some scholars should be the cut-off point for accepting models, rather than .10 (again, see Byrne 2001, ch. 3).

c) Structural models including political behavior

Now we can add political behavior to the model to test the social citizenship hypothesis about a link between welfare attitudes and voting (diagram 5). As table 4 (columns 4 and 5) shows, both the Erikson-Goldthorpe SEM model and the Marxian SEM model confirm the social citizenship hypothesis. A very strong relationship exists between supporting welfare programs (PRO-WEL-FARE ATTITUDES) and LEFTIST VOTING. In both cases the standardized coefficient is .55 or .56, making the explained variance of LEFTIST VOTING 30–31 % (this is obtained by squaring the standardized coefficients). Once again both models pass the closeness-of-fit model tests and the general results are rather similar. However, again the Marxian model explains a much greater portion of variance in PRO-WELFARE ATTITUDES, with a R^2 of .46 compared to .23 for the Erikson-Goldthorpe SEM model. Furthermore, only the Marxian model passes the more stringent demand that RMSEA be under .08. Regardless of measurement for class, this study supports the notion that social democratic regimes can increase their electoral support by implementing generous welfare policies.

d) Non-recursive (two-way) models

As already noted, most social scientists writing about the relationship between welfare attitudes and voting use voting as an *independent* rather than *dependent* variable (see, for example, Edlund 1999, 2000, Forma 1999, Forma and Kangas 1999, Knudsen 2001). In contrast, this article follows the social citizenship hypothesis in using LEFTIST VOTING as a dependent variable, which depends on welfare attitudes. To make the social citizenship hypothesis even clearer and to show that it is more reasonable to use LEFTIST VOTING as a dependent variable that depends on PRO-WELFARE ATTITUDES rather than to use it as an independent variable that explains PRO-WELFARE ATTI-TUDES, a non-recursive model was tested. In this model, LEFTIST VOTING is simultaneously a dependent variable explained by PRO-WELFARE ATTI-TUDES and an independent variable that explains PRO-WELFARE ATTI-TUDES. In other words,

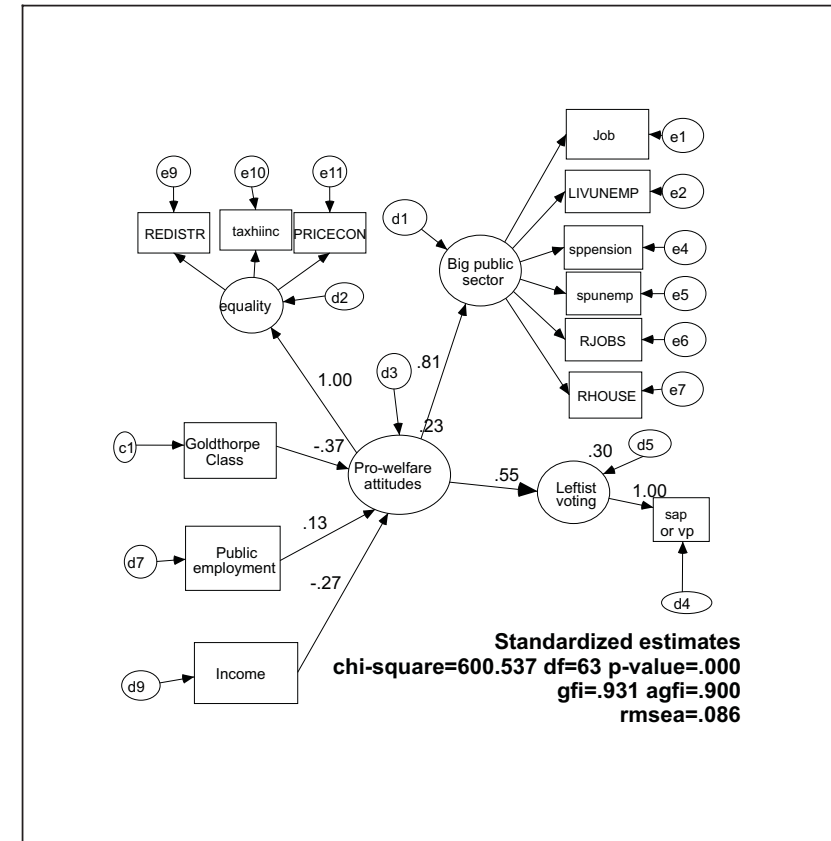EXPLANATORY VARIABLES➔PRO-WELFARE ATTITUDES↔LEFTIST VOTING

Diagram 5. Struktural model using Erikson-Goldthorpe and including voting.

To save space, the full diagram has been left out, but it is actually the same as in diagram 5, except that an additional path is drawn from LEFTIST VOTING to PRO-WELFARE ATTITUDES. In both the Marxian and Erikson-Goldthorpe models, LEFTIST VOTING as a dependent variable remains statistically significant at the .001 level, but as an independent variable it is not significant. In addition, LEFTIST VOTING as an independent variable explains much less variance in PRO-WELFARE ATTITUDES than the variance in LEFTIST VOTING which PRO-WELFARE ATTITUDES explains. In the Erikson-Goldthorpe model, LEFTIST VOTING as dependent variable has a standardized coefficient of .47, while as an independent variable, its standardized coefficient is only .12. In the Marxian model, LEFTIST VOTING as a dependent variable has a standardized coefficient of .51 compared to .07 when it is an independent variable.

Thus, we can reject the recursive model in which LEFTIST VOTING both explains PRO-WELFARE ATTITUDES and is explained by PRO-WELFA-

RE ATTITUDES. We can also reject the traditional regression analysis that has LEFTIST VOTING as an independent variable that explains PRO-WEL-FARE ATTITUDES. Choice of political party does not influence welfare attitudes; instead, welfare attitudes influence our choice of political party.

Conclusion

The present study shows that if one uses more sophisticated statistical methods, one can greatly improve upon Svallfors' results. Models using SEM were more parsimonious, had less independent variables, had better model fits and could explain a much greater portion of the variance in welfare attitudes.

At the substantive level, this study also brings into question several of Svallfors' conclusions, which have been shared by other social scientists as well. First, it shows that Svallfors is basically correct in arguing that support for welfare policies do not differ much among west European countries and the most important difference is rather the difference between western Europe and the USA. However, confirmatory factor analysis indicates that welfare attitudes contain a second dimension: support for equality. It is in this area that Swedes distinguish themselves. Three questions scale well for EQUALITY (support for increased redistribution, support for higher taxes for the wealth and support for price controls). On *all three* questions Swedes on the average are the most positive toward equality. The support for higher taxes shows that Swedes are more willing to finance generous welfare policies than Germans, British or Americans. While people in all western countries appear to be positive toward receiving benefits and services from the government, Swedes are clearly more willing to pay higher taxes to finance these measures. This also refutes Aalberg's (1998) findings that Scandinavians are more generally in support of income equality than other Europeans, but they are not more supportive of programs that increase equality, as this present study shows that Swedes are clearly more willing than Germans, British or Americans to support government programs that support redistribution (v16), price controls which support equality of consumption (v 18) and higher taxes that can pay for these problems (v 57).

Although we cannot be certain of the reasons why Swedes are more supportive of increasing equality, one interpretation is that universal welfare states do not increase support for the actual programs, but they do increase the readiness to pay for them. Another possibility is that Swedes already had a more egalitarian culture to begin with, which made it possible for the social democrats to come to power and dominate the political scene and implement universal policies. In order to test this hypothesis, however, we would need comparative data on public opinion from the period before the social democrats started their dominance in 1932 and such data is not available.

Second, this study questions Svallfors' conclusion that social democratic welfare regimes cause a cleavage between men and women. Svallfors follows Esping-Andersen in claiming that the public sector is larger under social de-

mocratic regimes and women are more likely than men to work in the public sector. Thus, women become more dependent than men on the public sector, since it is their main employer. This induces a conflict over welfare policies, as women can also lose their jobs if the government cuts back in the welfare sector. Indeed, studies that only have gender as a variable have come to similar results (besides Svallfors 1999, see Andreß and Thorsten 2001). This study shows, however, when controlling for public sector employment gender is no longer significant. This indicates that men working in the public sector are just as likely as women to support generous welfare policies and that among public sector employees gender does not matter (except of course, for their original choice of profession). However, no previous studies have indicated that the conflict in attitudes between those working in the public sector and those working in the private sector is anything special for social democratic regimes. Perhaps Esping-Andersen is still correct that welfare regimes create cleavages between public and private sector employees and this in turn implies that women are more likely than men to support a greater public sector, since they are more likely than men to work in the public sector. Still, this study suggests that his hypothesis be revised to claim that *all* welfare regimes create this cleavage.

Third, this article brings in the link between welfare attitudes and political behavior. Svallfors has not included this aspect in his studies and several others (such as Edlund 1999, 2000 and Knudsen 2001) have used voting as an independent variable that explains welfare attitudes. With the exception of Ahn's (2000) unpublished doctoral dissertation, not even other articles using SEM have including voting in their models (see, for example, Andreß, Thorsten 2001 and Epstein, Kaplan and Levanon 2003). In contrast, this study uses welfare attitudes as an intermediary variable that is explained by socioeconomic factors and in turn explains voting. In other words, rather than use a model that assumes that voters first become leftists and then form their attitudes on welfare policies, the model used here assumes that voters first for various socioeconomic reasons develop welfare attitudes and *then* make voting decisions. The non-recursive model shows also that when both hypotheses are simultaneously tested, voting as an independent variable becomes insignificant, while voting as a dependent variable remains strong and highly significant. Thus, the social citizenship hypothesis has been confirmed in the sense that in Sweden, with its tradition of universalist welfare policies, those who support these policies are also more likely to vote for leftist parties.

Notes

1. It should be noted that Page and Shapiro (1992: 122) do present a correlation coefficient (Pearson's r) for the relationship between believing the government should do more to expand employment and increases in unemployment rates. However, they never analysis which demographic or socioeconomic groups support these policies.

2. See Byrne (2001) chapter 3 for an overview.

3. Similar to Nilsson, Oscarsson (1998) limits his discussion on voting and attitudes to these two variables and neglects the socioeconomic variables that could explain welfare attitudes (although he does discuss some socioeconomic variables that can explain voting).

4. One possible disadvantage of AMOS compared to LISREL is that it cannot calculate tetrachoric and polychoric correlations. Since the variable LEFTIST VOTING is the latent variable of a dichotic variable (voting for the social democrats or Leftist Party) there would be certain advantages to using this type of calculation. However, it is not clear that using this method would improve the results. The simulation study by Yung and Bentler (1994) indicates that that the sample size should be at least 2000, and possibly 5000, to obtain satisfactory results, while in the present study the sample size is 1238.

5. The dimensions are redistribution, administration, costs and abuse; see Svallfors (1996: ch 3).

6. In setting up the model as a second-order factor, it was necessary to set the variances equal for the two latent variables EQUALITY and BIG PUBLIC SECTOR. However, the results are exactly the same as when doing a first-order CFA in which PRO-WELFARE ATTITUDES does not exist and a covariation path is instead drawn between EQUALITY and BIG PUBLIC SECTOR.

7. Korpi originally believed that economic democracy would become a major issue in the next step of political development in Sweden.

8. I am thankful to Svallfors for sending me his file with the recodings for Erikson-Goldthorpe. His recoding is based on Ganzeboom & Treiman "Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations," *Social Science Research* 25: 201-239.

9. In displaying the diagrams, the coefficients of the factor loadings for the individual indicators of the latent variables BIG PUBLIC SECTOR and EQUALITY are not shown. They have been eliminated to make the diagrams easier to read. However, the coefficients between PRO-WELFARE ATTITUDES and its second order latent variables BIG PUBLIC SECTOR and EQUALITY are shown. The fact that the standardized coefficients ranges from .81 to 1.00 for the SEM models show that the indicators of the second order latent variables must provide extremely good measures for these latent variables.

10. Svallfors (1999: 109) provides a slightly higher R^2 for Sweden at 16 %. This difference could be that he might use a different method for dealing with missing variables. The present study uses pairwise deletion, but Svallfors might have used a different method. In addition, rather than using maximum likelihood estimation, Svallfors uses MCA regressions, which are not possible in AMOS.

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Appendix: Recoding for class using the marxian definition

The following scale was used:

3 = bourgeois,

2 = professional ("white collar")

1 = worker

var 209 was used, because Sweden abides by the NSCO system. The class of the respondent was coded in the following steps:

1. create file, **bourg**, for var213 (self-employed). Recoded, so that if v213=1(self-employed), then now = 3. Otherwise, = 0.

2. create file **profswe**, for var209. Use filter for **profswe**, if v=13 (i.e. Sweden).

3. recode **profswe**, so that =2 (that is professional), 406-980=1 (manual worker) and 981=2 (officer), 990 and 999 are SYSMIS

4. create file **sweclass**, so that **sweclass** = profswe.

5. recode sweclass so that x$3=3.

Coding spouse's profession:

3=400, 297, 331, 210-219

2=981, 609, 621, 1-399, 402-404, 602-603

0=SYSMIS=990-999

all others=1