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**DO WE NEED MORE INCOME  
DIFFERENTIATION TO INCREASE THE  
EMPLOYMENT RATE IN EUROPE?**

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## **Do we need more income differentiation to increase the employment rate in Europe?**

### **1 On the Service-Sector Debate. The Case of Germany**

In Germany less services (S) are carried out via market than in a number of other countries. This so called “services gap” is often seen as the most important reason for Germany’s actual employment problem. Some authors calculated that up to four million jobs would inevitably be created if we reached Danish or US-American employment rates within the service-sector (SS) (Klös 1997, Scharpf 1997). If we succeeded in turning the correct adjusting screws here, the problem of unemployment in Germany would be solved.

Such calculations are tacitly based on a possible convergence of economic development. But as a matter of fact national economies show different structures which are not to be changed easily – according to their economic specialization within the international division of labour, to institutionally and culturally marked dividing of work in activities payed for or not, to the significance of the informal sector and their welfare-systems etc. In spite of this objection it makes sense to concentrate the employment policy debate on S. Especially there employment has been growing during recent years and – according to all predictions – this will also be true in future.

Opinions diverge at the debate on what might be the correct adjusting screws for the development of S within the complex wicker-work of economy. Following Baumol (1967) a group of authors sees the main problem in the so called “cost disease” of S. They quote that there were hardly any possibilities for putting down the price of labour-intensive S by rationalization. If with S being resistant to rationalization wages rose along those of the economy as a whole prices would rise out of proportion. As at the same time the demand for S reacted in an extremely price-sensitive way those S would be pushed away from the market. The “benchmarking group” of Germany’s former “labour-alliance” on this theoretical background sees high wages as the decisive obstacle for the expansion of S and very apodictically quotes: “The expansion of the service-sector can ... be supported effectfully only(!) by putting down labour-costs.” (Fels et al. 1999). For curbing the “cost disease” a higher degree of wage dispersion is suggested – according to the political point of view with or without public subsidies or tax allowances.

Other authors see various dimensions of economic and social modernization as the most important driving forces for the development of S, like the extending chains of production within the secondary sector (Bullinger 1997), like modernized household and family structures and a reorganization of the welfare state (Bosch et al. 2002 *a*), new working time models, and also product innovation or professionalizing of S (Beyer et al. 1998, Baethge 1999). These authors’ conclusions turn towards a completely different direction. A. o. they aim for supporting innovations, training, increasing employment rates of women, new ways of work organization and working time, and quality assurance. Widening the wage dispersion is looked at sceptically or it is even disapproved, as quality and lust for innovation are hardly to be expected from badly paid employees.

Which of the two positions is correct after all can only be justified empirically. Doing this it is not possible to handle SS by a wholesale judgement as it is done quite often. This sector is combined from various sub-areas which grow out of different reasons. This is not in favour of simple explanations or easy solutions offered by politics. The following shall contribute to an empirically based back up of an analysis of the driving forces of tertiarisation. To do so the development of S in Germany in comparison with Europe shall be given to begin with. While doing this indicators will be developed which are used for the then following analysis of reasons<sup>1</sup> (paragraph 2). After this the effects of wage dispersion on S-employment will be examined (paragraph 3). Then there will follow the analysis of the correlation between S and the various dimensions of social and economic modernizing (paragraph 4). This essay will be finished by giving conclusions for a sustainable S-policy in Germany (paragraph 5).

## 2 Is there a Shortfall of Services in Germany?

The employment rate of SS in Germany is about 10% less than the appropriate rates in the Netherlands, Great Britain, and the Scandinavian countries. On the other hand the employment rate of the industrial sector in Germany is significantly higher than in most other European countries (table 1). This mirrors Germany's specializing within the international division of labour. The high export-surplus of industrial goods is contrasted by an import surplus of S, not least because of the Germans' international tourism. The higher employment rate of the industrial sector does not compensate the differences to the countries mentioned above concerning S, so that the total employment rate in Germany stays significantly behind the rates of these countries.

But depending on working-time the same employment rates may hide quite different volumes of paid S-labour. So it makes sense to also put into the account the hours per week done by every person at the age of gainful occupation to neutralize the effect of working-time. The volume of work characterizes the volume of services (VS) realized via market. Table 1 points out that although the employment rate of SS in the Netherlands is almost 10% higher than the German rate the volume of working hours per week is only insignificantly above the German rate because of shorter working time in the Netherlands. But the volume of work done in Sweden, Denmark, and Great Britain is 20% and more higher than the German rate. This difference cannot be explained by effects of working time as the employment rates in these countries are similarly higher in percentage than in Germany.

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<sup>1</sup> Data analysis and calculations were done together by Alexandra Wagner and myself and are elsewhere given in more detail. In the following I will reach back to these joint works (Bosch et al. 2002 *a+b*)

Table 1:  
*Employment rates divided into sectors and given in per cent and volume of work in SS per head of population of working age in the EU in 1999*

Country	Employment rates <sup>1)</sup> divided into sectors in percent of gainful population				Volume of service sector per person of gainful population in hours per week
	Total	Agriculture	Manufacturing	Service sector	
<b>Austria</b>	68,8	4,3	20,5	44,0	16,7
<b>Belgium</b>	59,4	1,4	15,3	42,7	15,9
<b>Denmark</b>	76,9	2,6	20,6	53,5	19,1
<b>Finland</b>	67,9	4,3	18,8	44,6	16,8
<b>France</b>	60,7	2,6	16,0	42,1	16,1
<b>Germany (O)</b>	63,0	2,5	20,0	40,5	15,6
<b>Germany (W)</b>	66,0	1,7	22,6	41,6	15,0
<b>Greece</b>	57,2	10,2	13,2	33,9	14,7
<b>Great Britain</b>	71,6	1,1	18,6	51,8	18,9
<b>Ireland</b>	63,9	5,5	18,1	39,9	14,6
<b>Italy</b>	53,4	2,9	17,3	33,2	12,7
<b>Luxemburg</b>	61,4	1,0	13,7	46,7	18,0
<b>Netherlands</b>	71,4	2,2	15,1	50,4	16,2
<b>Portugal</b>	71,3	9,0	25,2	37,2	15,1
<b>Sweden</b>	71,6	2,1	17,9	51,5	18,9
<b>Spain</b>	52,8	3,9	16,1	32,7	12,9

<sup>1)</sup> Share of employed persons within all population aged between 15 and 65 years

Source: EU Labour Force Survey 1999, own calculations  
 (Bosch/Wagner 2003b)

If we give a more detailed explanation of the VS we will see that in all EU-countries the biggest part of the VS is within social S. Far behind there follow distributive S, production- and consumption-orientated S. (table 2). With S we recognize profiles specific for countries. Southern-European countries have got a rather low level of social S. Portugal, Spain, Greece, and Italy for example have got a low level of working hours with social S and such close to production and because of tourism a high level at consumption-orientated S (except Italy<sup>2</sup>). The Scandinavian countries have got the highest volume of working hours in the employment-intensive social S and a low level in consumption-orientated S. High figures at such S being close to production may on one hand be because of a significant finance sector (Luxembourg or the UK for example) or because of quality-orientated industrial production (Western Germany, France, Sweden, Finland). If we compare the Western German figures to the Danish or Swedish ones we will see that the by far biggest gap is at social S.

If these differences are only due to various economic and social structures which are not easy to change or if lower rates point out to unexhausted growth potentials, cannot be revealed from such figures. Only the answer to the question whether path-dependent developments are to be expected or if a convergence is possible or wanted does allow a statement on a services gap being existent in Germany or not. This question can only be answered if we more clearly analyse the structures behind the different profiles of the countries mentioned.

2 It may be judged that these figures are distorted by informal economy.

Table 2:

*Weekly volume of work in services per head of population of working age in hours in the EU in 1999*

Country	Production-oriented services	Consumption-oriented services	Distributive Services	Social and personal services
<b>Austria</b>	2,34	1,65	5,22	6,31
<b>Belgium</b>	1,98	0,93	3,77	6,69
<b>Denmark</b>	2,90	0,63	4,91	9,18
<b>Finland</b>	2,47	0,89	4,21	7,78
<b>France</b>	2,60	1,31	4,05	6,90
<b>Germany (O)</b>	1,78	0,88	3,96	7,78
<b>Germany (W)</b>	2,19	0,9	4,01	6,40
<b>Greece</b>	1,10	2,19	3,10	4,51
<b>Great Britain</b>	3,67	1,04	5,13	7,64
<b>Ireland</b>	2,49	1,55	3,81	5,09
<b>Italy</b>	1,26	0,99	2,46	4,84
<b>Luxembourg</b>	3,93	1,32	4,32	6,14
<b>Netherlands</b>	3,18	0,69	4,14	6,87
<b>Portugal</b>	1,35	2,46	3,42	5,47
<b>Sweden</b>	2,85	0,73	4,32	9,48
<b>Spain</b>	1,54	1,87	3,16	4,19

Basis: employed persons  
According to NACE the services were as follows assigned:

- Social and personal services 75, 80, 85, 90-93;
- Production-oriented services 65-67, 70-74;
- Consumption-oriented services 55, 57, 95;
- Distributive services 60-64
- Other services (99) are not here specified because of low values.

*Source: EU Labour Force Survey 1999, own calculations*

To identify these structures figures from the European Labor Force Survey done by EUROSTAT and from other sources will be analysed as follows. By a correlation algorithm we will try to find correlations between single influential factors and the volume of S.<sup>3</sup> By help of such correlation algorithms there can also only common development be identified which can be observed in the same way in all countries. Country-specific specializing within the international division of labour cannot be explained by this way. Just this specializing marks the structures of the great number of European countries. It is not possible to compare a single European country to the USA whose single states have specialized but have got a lower outward interconnection.

### 3 Wage dispersion and Volume of Services

The OECD surveyed the relation between income differentiation and general employment rate or unemployment and did not find any positive connection (OECD 1996). The analysis of the OECD was based on employment numbers which did not isolate the effect of working time. To find reasons for the demand for S it makes more sense to take as a basis the volume of work. On the income distribution within the EU there are figures at hand offered by

3 Multi-variate analysis unfortunately cannot be done because of the small numbers (15 EU-countries) and because of the mutual correlations between the influential factors looked at. So the correlation calculation has got mainly heuristic functions for check and further development of theoretical thoughts on the development of S.

EUROSTAT and giving the relation of the upper 10% of the income stratification to the lower 10% of the income stratification. These figures refer to net-income including all governmental transfers.

The correlation between income in equality and the general volume of S is negative and significant (table 3). The same is true for the correlation between income-inequality and production-orientated and distributive S. This shows that a higher income-inequality rather goes along with lower VS in the fields mentioned. The correlation between income-inequality and volume of work in social S ist strongly negative and highly significant. So the more inequal the income differentiation the lower is the volume of work in social S (Figure 1).

Table 3:  
*Correlations between income inequality (1994) and weekly volume of work in services per head of population of working age (1999)*

Volume of work in hours per week per person of working age....	...correlated with income distribution P90/P10	
	Strength of the correlation	Significance
Service sector as a whole	-0.520	*
Social and personal services	-0.776	***
Services to private households	0.645	**
Consumption-oriented services	0.864	***
Distributive services	-0.512	*
Production-oriented services	-0.573	*

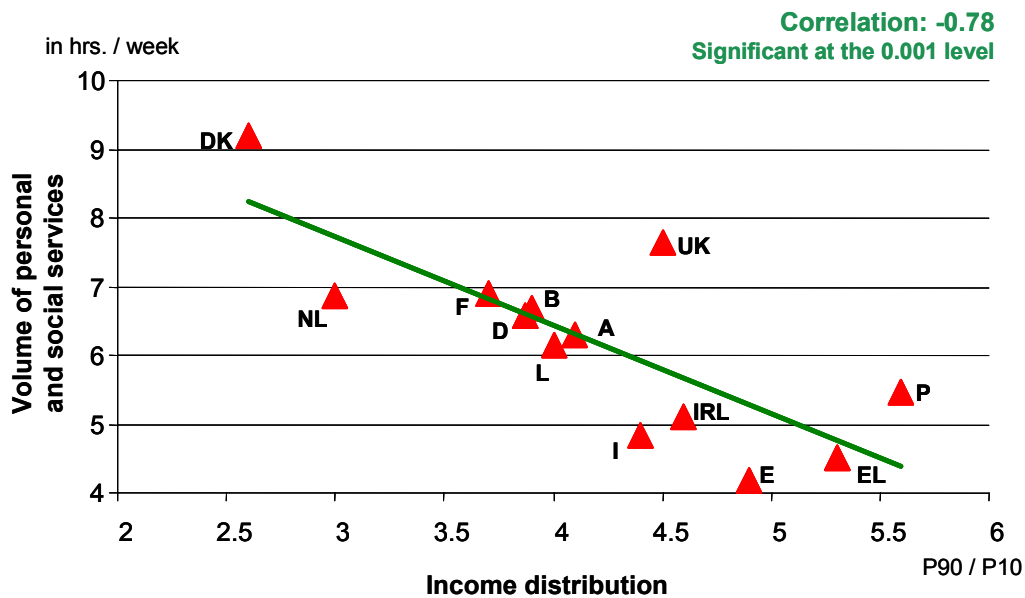
\* significant at the 0.05 level  
 \*\* significant at the 0.01 level  
 \*\*\* significant at the 0.001 level

Source: EUROSTAT, own calculations

But for single sub-sectors there can also be stated positive correlations between income-inequality and volume of work. The correlation between income-inequality and volume of work at consumption orientated S (hotels, restaurants, private households) is strongly positive ( $r=0,86$ ) and highly significant. But it must be suspected that at “hotels and restaurants” (NACE 57) differences of wages are not the most important driver for growth. The Southern-European countries with their highly wage dispersion have specialised in tourism within the inner-European work-division. The situation is different at private households. The idea is comprehensible that with a higher wage dispersion wealthy households will more often demand for such services than in a situation of more equal division of income and that there will rather be employees who have to work in such mostly badly payed S.

At this point it is important to point out the dimensions. Especially in countries where social S are highly developed (DK, FIN, S, UK) the volume of work in this field is seven to thirteen times higher than that of consumption-orientated S and more than one hundred times higher than S in private households. A higher income-inequality could only find positive expression at consumption orientated S but which on their side hold a rather low share of total AS. But the special conditions in the strongly tourist frequented Southern-European countries (Portugal, Greece, Italy, Spain) are not easily applicable to Germany.

Figure 1:  
*Income division (1994) and volume of work in services at social services  
 per head of population at working age (1999)*



Source: EU Labour Force Survey 1999, own evaluation and European Community Household Panel 2 (EUROSTAT 1998: 176)

## 4 Social and Economic Modernization and Service

Many S – especially private and household orientated ones – are luxury items which are demanded only if the needs for material goods from the primary and secondary sector are satisfied and if the buying power has been increased by economic growth. Fourastie´ talks about a “hunger for the tertiary”. Klodt et al. (1996) showed that with growing income the demand for services increases (rising income-elasticity). To describe the wide frame of structural change Fourastie´’s thesis is enough. To understand why the VS of certain countries reach different dimensions we have to dig deeper and to find out the reasons for demand. Different dimensions of economic and social modernizing are important figures for an explanation. This modernizing is not automatically a by-product of economic growth but it is initialized only by well-directed political action.

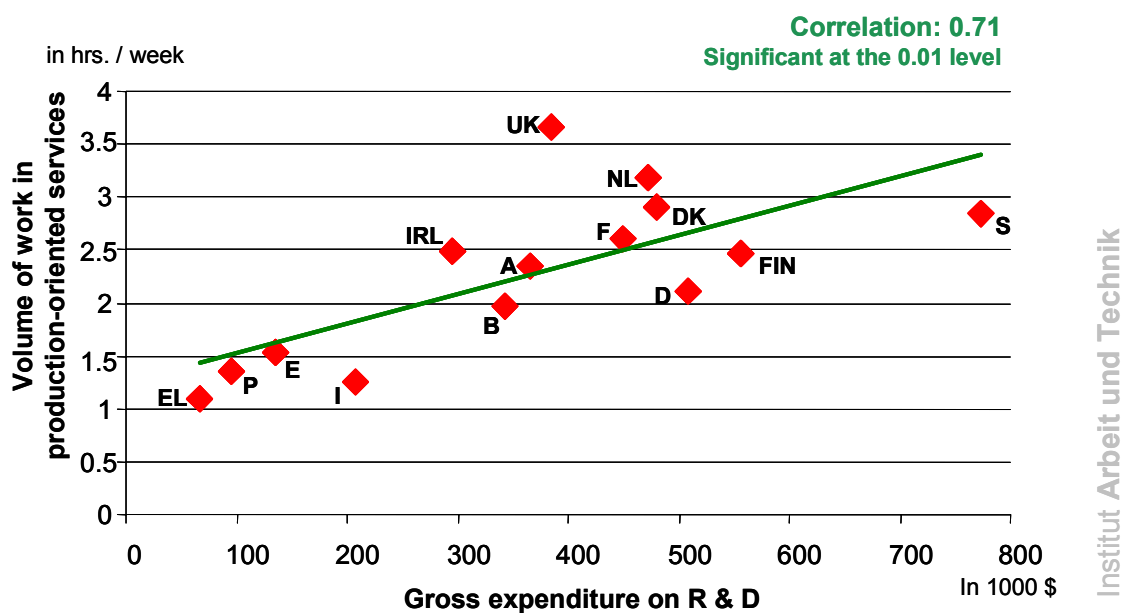
### 4.1 Economic Modernization

#### a) *Transition from Mass- to Quality-Production*

The sectoral postponement of employment and increase in value does not mean that S grow while being completely independent from material production in agriculture and industries. The enormous increase of productivity in the first two sectors and also the improving quality of their products is more and more fixed to such S, which go ahead of the production process (i. e. research & development, design, construction), which accompany it (accountancy, personal matters, advertising, controlling aso.) and which come after (selling, consulting, service aso.).

Expenses for research per head of population can be seen as an indicator for the level on which the industries' orientation towards innovation is, as most of the resources for R&D aim for its procedures and products. There is to be seen a significant correlation between the volume of work at production-orientated S and the expenses for research per head of population (Figure 2)<sup>4</sup>. The correlation is even more significant if we take out special influences. For example Great Britain, though her expenses for R&D are not remarkably high as it is an international financial centre, because of her specialising shows the highest volume of work with those S being close to production. Without Great Britain's special role the correlation between the volume of work at production-orientated S and the expenses for research per head of population is even as high as 0.82.

Figure 2:  
*Expenses for research per head in purchasing power capacities and close to production services 1999*



Source: EUROSTAT 1998 and OECD 1999

### b) Professionalizing

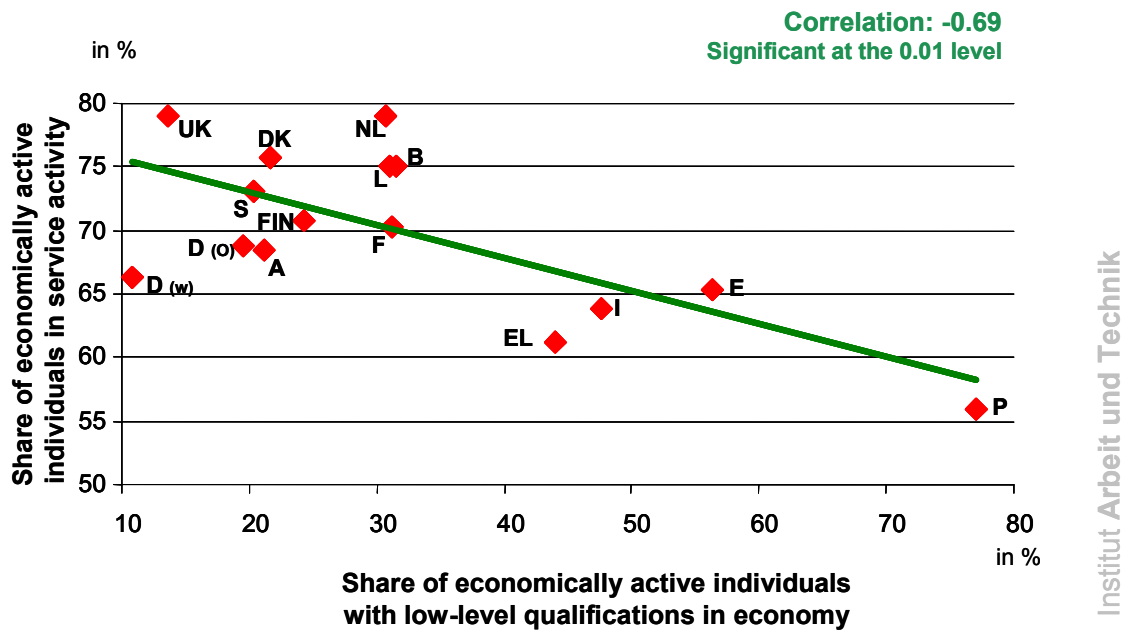
With many S non-standardized work is done whose quality can be judged directly. Partly the service is developed together with the customer. Its effect often occurs only a long time after work has been finished and is then hardly to be isolated from other effects. Such work often is only demanded if it is done professionally and the customer has built up confidence in the employee who does this S. As a rough indicator for professionalism and quality of S there may be taken the employees'. As the qualification-systems of countries are highly different and some work is seen as academic work in one country and as such of average qualification in another, only the correlation between the proportion of employees with low qualification and the proportion of employees in SS will be counted. As expected the correlation is strongly negative and highly significant (Figure 3). The higher the proportion of less-qualified in overall economy the lower is the proportion of gainfully employed working for S.

4 The correlation between the proportion of employees in high-tech-branches and the volume of work in production-orientated S is also positive and is at 0.57. The correlation between the proportion of employees in high-tech-branches and the volume of work in social S is even as high as 0.63, which points out that especially those highly qualified employees demand very much social S, like education, health, or wellness.



Figure 3:

*Proportion of gainfully employed with low qualification in overall economy and proportion of gainfully employed working in the services branch, 1999*



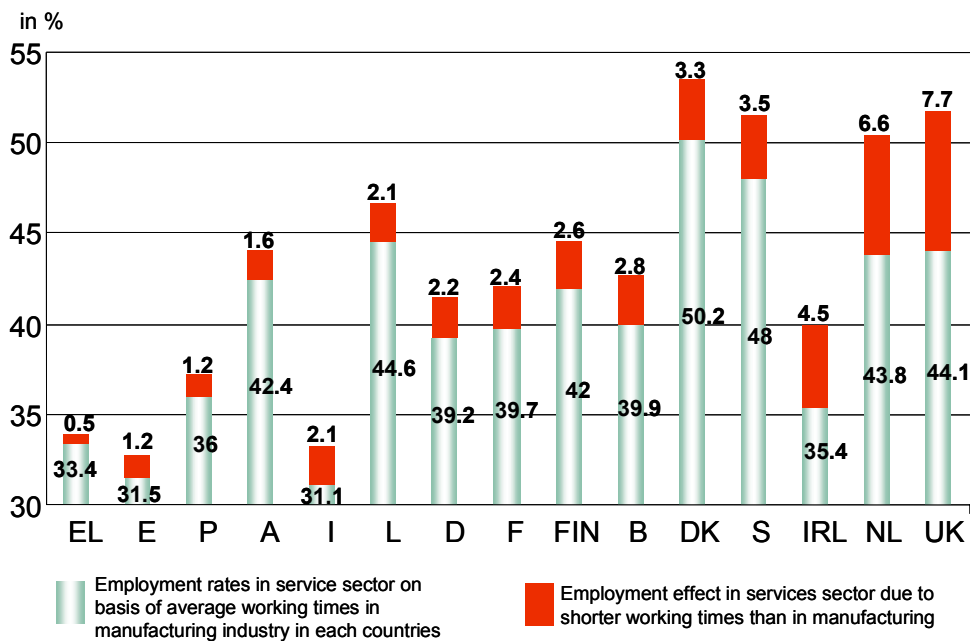
Source: EU Labour Force Survey 1999 own evaluations

### c) *New Models for Working Time*

In all EU-countries working time in SS is shorter than in industries. There are two groups of reasons for that: Firstly in SS there are more than average women- and student-employees (Voss-Dahm 2002) who because of their various roles (understanding of role in society, bringing up children, studying, house-work) are only at hand in a limited way and prefer shorter working time than usual. Secondly companies especially with work-intensive S being characterized by a high price elasticity of demand are trying to cut expenses by time-adjustment of demand and offer. With demand strongly fluctuating in time this adjustment is easier if time units can be put into portions. The differences between the average working week in the secondary and the tertiary sector have increased in all EU-countries except Portugal and Sweden during the past years. This difference was at a peak in 1999 in Great Britain with 6.4 and in the Netherlands with 4.9 hours per week; Germany with 2 hours per week is in the lower pack. So the expansion of SS is partly based on the stronger reduction of working time in this sector, especially due to an increasing proportion of part-time work and a low level of overtime. Figure 4 illustrates the correlation between the shaping of working time and the growth of employment rates at S. So the relatively short working time in SS contributed to a sectoral shift of the proportions of employees. The employment rate in SS today would be lower if in this sector working time was as long as in the secondary sector. This effect is especially distinctive in Great Britain and the Netherlands. Their employment rates in SS would be 7.7 and 6.6 percentage points below the actual number with working time being equal in both SS and industries. By this effect of working time the employment rate in Germany's S is increased by 2.2%. This effect of working time may as well be a result of traditionalism as of more modern structures of working time. In Great Britain and Ireland the effect of working time is so significant because men working in the secondary sector do overtime on a high level. In Scandinavia and the Netherlands on the other hand companies developed flexible models of working time for women at first but increasingly for men also. Time off in lieu in case of overtime, individual chances and the right for part-time work and sabbatical years and also new kinds of part-time – substantial part-time work of one's choice

from 25 to 35 hours – are more common there than say for Germany or Southern Europe. (Bielenski et al. 2002).

Figure 4:  
*Effects for employment given in employment rates of the services sector due to shorter working time in the service sector, 1999*



Source: EU Labour Force Survey 1999, own calculations

## 4.2 Social Modernization

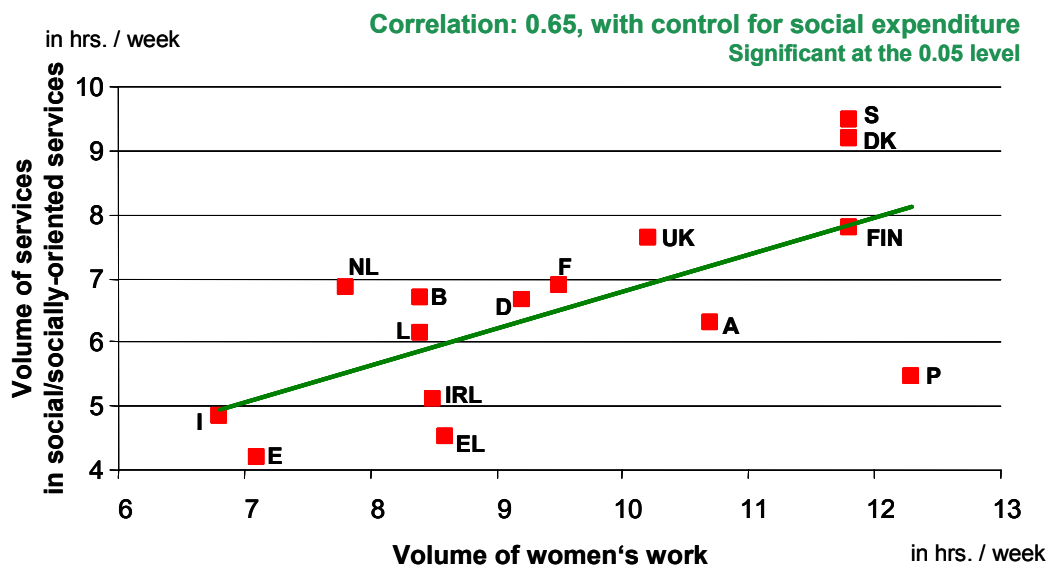
In the past much S was done privately mainly by housewives. The welfare state is able to support this model by financing social benefits for non-gainfully working women by derived health insurance and pension schemes and supporting family phases without waged work (via separate taxation for man and wife or education allowances). But the state can also invent incentives for starting waged work, say by individual taxation and social security or by providing public S which partly replace private S (child care, nursing). All European states, though at different speed, are in a phase of transition from the traditional provider model to a new model of waged work which makes work possible for both partners and which requests more professionally done S. Such a modernizing meets the demands of the majority of women and men (Bielenski et al. 2002).

### a) Women in Employment and Services

With the removing of economic activities from the household the demand for S grows. The most important reason for such an outsourcing is that the number of women in employment is increasing. If women are working increasingly because of higher qualification and changed outlines of their lives and if men do not reduce their working time in a dimension according to this, then the time-resources of households for doing work themselves will decrease. Households are in a situation either to obtain certain S from the market or to go without. The correlation between the volume of work done by women and the social S is at 0.65, by which explains 44% of the variance (Figure 5). This means by increasing employment of women jobs in SS could be created. On the other hand there is no significant correlation between women in employment and the other Ss.

Figure 5:

*Volume of work done by women per head of population age of gainful occupation given in working hours per week and volume of S per head of population at age of gainful occupation in social S (1999)*



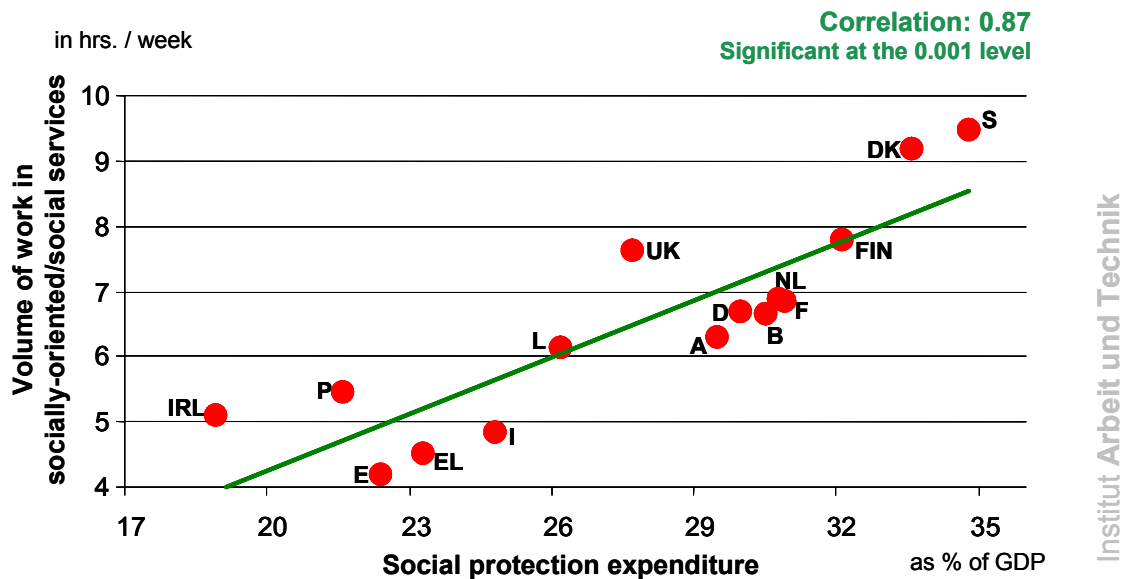
Source: EU Labour Force Survey 1999, own evaluation

### b) *Social Expenses and Services*

The correlation between the proportion social expenses occupy from gross domestic product and the volume of work in social S is even higher, as it is  $r = 0.87$ , which explains 76% of the variance (Figure 6). Those states which are above the line of regression (i. e. UK, S, DK) rather support orientation towards employment while those states below it (D, NL, A) rather provide incentives towards family work (Dingeldey 2000). While explaining this correlation we reach a topic which is central for the debate on low wages: With a society changing towards human knowledge increasingly playing a vital role, social services which are necessary for building, upkeeping, rebuilding, and protecting human capital are getting more and more important. Usually these services cannot be provided sufficiently by the market. Most of the social services are work-intensive and can be rationalized only in a limited way. A lot of them require high qualification, which additionally let their prices grow. Some of these services are only demanded sporadically – say in case of risk (i. e. illness or after an accident) – but then in large quantity. High prices and the demand being dependant on risk are reasons for a situation in which many potential customers are not able to pay for these services in case of need, as far as they are to be financed privately. In so far we are allowed to speak of these services suffering from cost-disease. Were they only be carried out on the market, they could not be demanded by a lot of the actually needy. Not demanding educational, health, and nursing services would have severely negative effects on the quality of human capital, prosperity, and the social solidarity of our societies. Within an education system purely controlled by market the demand would be dependant on individual income; an education system being terraced by income-classes with appropriate social inequalities would arouse. The situation would be quite similar for healthcare system, for health and safety protection at the workplace, or for nursing. Again we would be able to judge an income situation from teeth or from the level of education children have. Equality of opportunity within society would be decisively restricted. Out of this jumble of different interests, of improving the equality of opportunity, of improving economic efficiency by handling human capital more carefully, and of avoiding social conflicts, various instruments to overcome the

cost-disease of these sensible services were created. From free and tax-financed providing of services (i. e. schools) and insurance solutions (health insurance, pension scheme, private nursing insurance), employers contribution (safety protection at workplace, accident protection) they reach as far as scholarships, contributions or vouchers. These methods of financing do not only contribute to a developing of demand but also to meeting the demand of poorer parts of the population in sufficient quality.

Figure 6:  
*Expenses for social security and for work in social S, 1999*



Source: EU Labour Force Survey 1999,  
own evaluation and EUROSTAT: European system of integrated social security statistics (ESSOSS) 1997

## 5 Conclusions towards a Sustainable Services-Policy

The most important driving forces for the growth of S-employment within EU-Europe have been identified. They are: next to income increase (1) transition to quality production in the secondary sector, (2) professionalizing of S, (3) modern models of working time, (4) integration of women into the labour market, and (5) extension of the welfare state and other financing mechanisms to overcome the cost-disease with services being socially important plus (6) country-specific specializing in the field of exporting services. It was not possible to prove any correlation between inequality of income and S-employment altogether however. This can only be proven for small segments of SS.

A second central result of our analysis was that S-employment does not automatically increase along with economic growth. Value-orientations of societies can be significantly different despite a similar level of economic development. The integration of women into the labour market depends on all social institutions being rebuilt as far as they are shaped for the male single wage-earner. Companies may use both traditional and modern models of working time. So the development of S-employment is more fixed to economic and social institutions and innovations than commonly estimated.

The third result is that many social S suffer from cost-disease. Financing these S strictly privately cannot be advised because of the extensive effects on equality of opportunity and economic growth and as these S are so important for the development of human capital.

Also the German position within Europe got visible. S are underdeveloped in Germany and there are a lot of hints that here there are potentials for growth. The analysis allows conclusions on how a consistent bundle of measures for developing S in Germany might look. The following combination of measures looks promising towards a sustainable S-policy:

- Because of the high income-elasticity of the demand for S economic growth is an important basis for an expansion of the S-sector.
- As a broad access to a lot of social S is necessary because of social justice and also for economic efficiency and for securing competitiveness in a knowledge society, it is the state's task to make this access safe by suitable financing measures. This does not mean that the state itself offers S. New ways of financing (vouchers etc) may improve quality.
- The potential of employment, which is the biggest in quantity, is in supporting women's integration into the labour market. For doing this passive resources of the welfare state must be activated. Especially such resources, which today are used for separate taxation for man and wife, for health insurance and derived pension schemes must be used for the extension of child care and full-time day schools a.o.
- Within the international division of labour Germany has specialized in high-quality industrial products. Being a country with high wage costs it will be able to keep up this role within international competition only by strongly orientating towards innovation. So further development of such services as are important for quality-production including all innovative systems (research and development, education and training) is of central importance.
- The effect of working time should be used for employment policy. Long-term it will not be possible to exploit this effect of working time if there is a strict differentiation between full-time and part-time as many employees will not accept being pushed into traditional part-time. So flexible working time on choice is necessary, by which also the gaps between full- and (half-day) part-time can be filled and which more than anything else will make possible variations of working time within the course of employment (Bielenski et al. 2002).
- Improvement of quality by professionalizing and technical and organisational innovation of services should be supported. By quality-tests, or other standards and also by the improvement of professional training trust in good performance is built up and the demand is strengthened.
- Single groups like people with health problems will need long-term subsidies to make a stand on the labour market, others will need start up financing and even services of labour-market policy like consultation, qualifying, and negotiating.

Next to such problems with regard to content there is a mental problem to be solved. The debate on service economy in Germany as well as in many other countries has 90% been concentrated on minor phenomena during recent years, like extending the low-wage sector. By doing this the central topics of economic and social innovation were neglected. The results of the Programme for International Students Assessment (PISA) did call back the significance of these topics in a painful way.

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