

Engine of Future Employment and Industrial Growth in Germany

Brief study for the German Federal Association of Private Social Service Providers (BPA)

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Nursing as a factor in the economy in 2010 – summary¹

The nursing market in Germany is expected to have a volume of 32 billion Euros in 2010. The nursing services will thereby make a contribution to value creation of 26.5 billion Euros (see overview 1). This service is rendered by 885,000 employed people and thus supplies healthcare to more than half of those in need of care, including more than 780,000 people in nursing homes. The costs of nursing are borne largely by social nursing care insurance (approx. 61 percent) and private households (30 percent), e.g. in the form of extra payments of sometimes over 2,100 Euros per month. Around 9 percent is borne by the social assistance authorities in the framework of assistance for nursing. The positive direct and indirect fiscal effects (taxes, social insurance contributions) amount to over 20 billion Euros, although this does not include the expenditure of social insurance.

The nursing market in the year 2010

Factors	Facts
People requiring care (demand)	2,404,000 people
number of which are in nursing homes	781,000 people
Employed	885,000 people (equivalent of 670,000 full time)
Turnover Volumes	32 billion Euros
Value Creation	26.5 billion Euros
Direct fiscal effects	11.5 billion Euros
Indirect fiscal effects	4.6 – 9.18 billion Euros (2005)
Private extra payments	around 30 percent of the costs
Private extra payments of those in need of care in nursing homes	between 1,320 and 2,131 Euros per month

Overview 1: Source: own estimates

The private contributions show that the wishes of people in need of care (and of their relatives) already play a major role in competition (Fig. 1).

Financing structure of nursing – shares in percent

Financing structure of nursing 2010 Shares of 32 billion Euros in percent	
	(59,7)social nursing insurance (9,2%)assistance for nursing (social assistance) (29,1%)private extra payments (2%)private nursing insurance

Fig. 1: Source: own calculations; Federal Statistical Office; healthcare expense statement; PKV (association of private health insurers)

¹ The present brief study is an updating of the extensive study by Enste (2009) and is based upon – among others – the scientific essay by Enste, Dominik/ Pimpertz, Jochen (2008). The basis of the calculations and the approaches for the estimates are explained there in more detail.

The current data from the nursing statistics from the year 2009 are not yet available, so the information in summary 1 is estimated. But the number of people employed in nursing had already increased by 30 percent from 1999 to 2007 and according to different forecasts, this trend has continued into 2010. The nursing sector is thus an important engine for the development of employment.

Future developments in demand and supply

The macroeconomic importance of the nursing market in Germany will continue to increase, however. The demand for full and part-time employees in the nursing sector could almost triple to up to 2.1 million by 2050. The main reasons for this are the increase to be expected in the number of people needing care to up to 4 million and the trend towards professionalization of care and the decline of family care. Of the 2.25 million people in Germany in need of care, in the sense of the German Nursing Insurance Act, more than two thirds (1.54 million) were cared for at home in 2007. 1,034,000 people in need of care only received nursing allowance and were as a rule only cared for by relatives. In general, however, there is a trend towards professional nursing. The proportion of all of those cared for at home (outpatient care and care from relatives) sank by around 72 percent (1999) to around 68 percent (2007). This trend is expected to continue only weakly into 2010 because the political changes to strengthen outpatient care will take effect. The trend towards professionalization will, however, continue.

Inpatient care: inpatient care is especially cost-intensive. It is not least because of this that it is often the main focus of attention in the scientific and public discussion. The major providers of inpatient nursing services include the common public institutions such as e.g. Caritas, Diakonie and the Paritätischer Wohlfahrtsverband (umbrella organisation for non-profit-making health and welfare organisations). In 2007 they still accounted for 55 percent of provision. Private providers accounted for 39 percent; 7 percent of all nursing homes were owned by public institutions. By 2010, the market shares are expected to have shifted further in favour of private providers (42 percent). Because the nursing market is to be regarded as a growth market due to the demographic change, the threat of increasing financial risks for the existing nursing establishments and nursing services will only arise if either too many new providers push onto the nursing market, political decisions are made to the disadvantage of professional nursing or the shortage of skilled personnel becomes even more noticeable. On the other hand, nursing homes face a risk from the financing side - regarding the structuring of nursing insurance - that is difficult to calculate.

Outpatient care: the commercial institutions were already the biggest provider of nursing services in the outpatient segment, with a market share of around 60 percent in outpatient nursing services, while the non-profit institutions accounted for around 38.5 percent (Federal Statistical Office, 2009). The greater weight of commercial institutions is in particular to be attributed to the barriers to market entry being substantially lower than in the inpatient segment. Firstly, the necessary investment costs are substantially lower and secondly the competition between the providers of outpatient nursing services is not distorted by the property subsidies for non-profit providers. As with nursing home services, it may be assumed that the commercial providers of outpatient care will in future continue to expand on their position. The greatest potential for growth is in informal care and in the hidden economy.

Moonlighting – value creation potentials in the hidden economy

Some households seek a way out of the dilemma between the desire to be employed and the high costs of (official) care in the (frequently illegal) employment of foreign carers, who enable 24-hour care for around a third of the cost of a place in a nursing home. Different estimates assume around 100,000 illegal employment relationships, in the absence of accurate data because the extent of illegal work in this sector can also only be roughly estimated. Due to the high labour intensity of nursing combined with the high burden of taxation - especially social security tax - on the factor of work, a higher than average proportion of moonlighting is

to be expected in a comparison with other industries. Last but not least, a part of the non-registered home helps in around 4.5 million private households in Germany also renders nursing services. The proportion of home helps that are employed illegally is, incidentally, around 95 percent. For the Federal Ministry of Family Affairs, Enste, Hülkamp, Schäfer (2008) estimated the additional employment potential in the entire household-related segment at 177,000 to 355,000 full-time jobs. Based upon a representative survey in 2007, the proportion of the total amount of illegal work in Germany accounted for by nursing for the sick and elderly is estimated at 4.3 percent with a volume of 5.8 to 6.6 billion Euros. As a comparison: the proportion of the official gross domestic product is estimated to be only around 1.2 percent. Nursing thus accounts for almost four times as high a proportion of the black economy than of the official gross domestic product, which is above all to be attributed to the high burden on the production factor of labour combined with the high labour intensity in nursing. Successfully fighting illegal work in this area could create at least 40,000 legal jobs. It is here assumed, based upon survey data, that only around a third of the value creation, which could be up to 6.6 billion Euros, can be made legal. Accompanying this would be estimated additional income tax revenues of up to 200 million Euros and additional social insurance contributions of up to 480 million Euros.

Growth Industry of the Future

The economic importance of nursing will in future show further substantial growth:

1. The population structure is changing dramatically. The number of over-60s will increase to almost 8 million by the year 2030. Every third inhabitant (2010: every fourth) will then be older than 60. The age-group above 80, which is especially frequently dependent on assistance, will almost double by 2050.
2. Due to the trend (useful from a national-economic standpoint) away from nursing by the relatives and towards professional nursing, the demand for nursing personnel will experience additional increase. The background to this is that in future, due to lower birth rates, children will not be there to take over the care of their parents, an increase in employment among women is to be observed and that social structures are changing towards smaller (single) households.
3. At the same time, there has been a strong tendency towards care in nursing homes, which may continue in future albeit to a lesser extent. Outpatient provision will thereby increase in importance.

According to different estimates, due to these developments, the number of people requiring care will double to over 4 million by 2050 and the number of nursing home places could even triple to up to 2 million. Based upon this estimate, turnover volumes can be estimated at approx. 45 billion Euros (2020), 62 billion Euros (2030), 70 billion Euros (2040) and 86 billion Euros (2050). Taking into account tendencies for prices to balance out and cheaper prices due to intensification of competition, the future market volume, based on the charging of prices at area level, would be lower per care level in different nursing homes (see Augurzgky et al., 2007 p. 64f). The value creation may be increased to up to 79 million Euros (2050). As a result of this the demand for full-time employees – without progress in productivity – in the nursing sector would almost triple to up to 1.6 million. With an annual productivity increase of 0.5 percent, the demand would still increase to the equivalent of 1.2 million full-time equivalent employees (Table 1). With an unchanged part-time ratio this would correspond to around 1.6 part-time and 2.1 million full-time employed people by 2050 (Table 1 -1st column).

Employment projection in the nursing sector up to 2050

Employment in full and part-time employed and full-time equivalents.

Without progress in productivity				
	Full and Part-Time Employed	Full-Time Equivalents		
	Constant Part-Time Share	Outpatient Care	Inpatient Care	Total
2005	760,000	140,514	408,768	549,282
2010	885,000	165,876	504,840	670,716
2020	1,187,000	218,325	681,174	899,499
2030	1,476,000	272,160	846,720	1,118,880
2040	1,686,000	316,680	960,960	1,277,640
2050	2,055,000	369,000	1,180,800	1,549,800
With 0.5 percent progress in productivity per year				
	Constant Part-Time Share	Outpatient Care	Inpatient Care	Total
2005	760,000	140,514	408,768	549,282
2010	863,000	161,793	492,111	653,904
2020	1,101,000	202,581	632,674	834,255
2030	1,302,000	240,052	746,888	986,940
2040	1,415,000	265,823	806,532	1,072,355
2050	1,632,000	294,486	942,356	1,236,842

Table 1. Original data: Federal Statistical Office, 2007; from 2010 own estimates

In less favourable variants of the population forecast, as many as 4.7 million nursing cases are expected. These do not yet include those people who need care but do not fall into a care level. The demand for nursing personnel could therefore increase even more greatly.

In view of these forecasts and to prevent drastically increasing contributions for nursing insurance to up to five percent by the year 2050, there is a need for innovative ways to care for older people. The best way to awaken creativity and innovativeness for the provision of care to older people is – with the safeguarding of minimum quality standards – competition between the providers to find the best solutions. The opening up of the nursing market to private providers has now already led to greater variety and competition in innovation and prices as well as sinking market shares of the non-profit and public institutions.

Fiscal Effects of the Nursing Market

Despite all the concern about the costs of nursing, the positive direct and indirect effects for the treasury should also not be overlooked. Cautious estimates for 2005 show that nursing generates tax revenues in an order of magnitude of over 18 billion Euros per year as it provides work (direct effect) to a large number of people and at the same time makes it possible for others to start or continue their employment (indirect effect) if the nursing of people in need of care is taken over by professionals. The following table 2 gives a first overview of the possible dimensions of the effects. The financing aspect of nursing insurance is not taken into account here, however.

The fiscal effects for 2005 can be calculated as follows: additional social insurance contributions of an average of 12,000 Euros and additional income tax revenues of 5,000

Euros can be assumed for each person employed full time.² The direct, total fiscal effect in inpatient nursing is thus 6.8 billion Euros and 2.38 billion Euros in outpatient nursing, which adds up to around 9.3 billion Euros. For 2010, this is estimated at over 11.5 billion Euros, so that the total effect is then over 20 billion Euros. Because on top of this, there are also the indirect effects from the additional employment that is made possible. These are between 3.4 and 6.8 billion Euros per year in inpatient nursing and between 1.19 and 2.38 billion Euros per year in outpatient nursing. The total effects for the treasury together amount to between 13,855 and 18,445 billion Euros (2005), which either stem directly from the nursing services or are implicitly and indirectly made possible by the nursing services.

The indirect effects cannot, of course, be attributed directly to nursing but instead only show the subsequent effects that can arise due to nursing services if these are rendered professionally. With respect to the development of the national economy, the continued professionalization has other positive effects on the national economy, disregarding the financing aspect, because nursing that has previously been informal then takes place via the market and is registered and taxed.

Effects of nursing services on employment and taxation (2005)

	Employed (Full-Time Equivalents)	Tax Revenues (in Bill. Euros)	Social Insurance Contributions (in Bill. Euros)	Total Fiscal Effect (in Bill. Euros)
Inpatient Nursing				
Direct Effect	405,000	2.025	4.86	6.885
Indirect Effect	200,000-400,000	1.0 – 2.0	2.4 – 4.8	3.4 – 6.8
Outpatient Care				
Direct Effect	140,000	0.7	1.68	2.38
Indirect Effect	70,000-140,000	0.35-0.7	0.84-1.68	1.19-2.38
Total Nursing Services				
Total Effect	815,000-1,085,000	4.075-5.425	9.78-13.02	13,855-18,445

Table 2 Source: own calculations

Conclusion

The development of the nursing market offers great potential for macroeconomic development. The view that nursing primarily represents a cost factor for the national economy and that workplaces in other industries are endangered in international competition by additional wages costs due to the pay-as-you-go financing of social nursing insurance must be corrected based on the results of this study. It is true that the contribution rates for nursing insurance will rise dramatically due to the developments if efficiency potentials are not used and innovative care solutions are not researched and implemented. Schnabel (2007) expects an increase in the rates of contributions to social nursing insurance to between 3 and 5.5% by 2050 depending on the scenario. It must not be overlooked, however, that the costs would also arise with another type of financing or indirectly even in the case of nursing by relatives (opportunity costs) because the development in demand caused by demographic changes can hardly still be influenced and what is more social nursing insurance is now already only a part

² This order of magnitude can be derived on the basis of the data of the Federal statistical Office (2008) on the earnings structure and tax burden.

insurance cover. Nursing services will change, with lasting effect, from being a cost factor to being a factor driving employment if the framework conditions (financing, regulation, minimum standards, controls) continue to be improved.

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