Discussion Paper No. 08-077

Institutional Childcare – An Overview on the German Market

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Zentrum für Europäische
Wirtschaftsforschung GmbH

Centre for European
Economic Research

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Nicht-technische Zusammenfassung

Die Ausweitung institutioneller Kinderbetreuung ist ein häufig genutztes Instrument, um die Fertilitätsrate und die Partizipation von Frauen am Arbeitsmarkt zu erhöhen. Die Verfügbarkeit von Kinderbetreungplätzen erleichtert es Paaren, sich für Kinder zu entscheiden, nach der Geburt in den Arbeitsmarkt zurückzukehren sowie familiäre und berufliche Verantwortung zu vereinbaren. Die Erhöhung der Zahl an Kinderbetreuungsplätzen ist insbesondere für Deutschland relevant, da die Anzahl der unter Dreijährigen in institutioneller Tagesbetreuung im internationalen Vergleich gering ist. Das Tagesbetreuungsausbaugesetz sieht vor, die Verfügbarkeit von institutioneller Tagesbetreuung bis zum Jahr 2013 zu erhöhen, so dass dann ein bedarfsdeckendes Angebot zur Verfügung stehen wird. Der momentane Entwurf zum neuen Kinderförderungsgesetz fasst darüber hinaus die explizite Beteiligung gewerblicher Anbieter bei diesem Ausbau ins Auge. Eine detaillierte Darstellung der aktuellen Situation der institutionellen Kindertagesbetreuung in Deutschland wird erstmals mit den neu verfügbaren Daten der Kinder- und Jugendhilfestatistik 2006 möglich. Ziel dieses Papiers ist es, auf Grundlage dieser Daten einen Überblick über den deutschen Kinderbetreuungsmarkt aus Anbieterperspektive zu geben.

Die Auswertung der Daten zeigt Unterschiede zwischen den verschiedenen Anbietern im Hinblick auf Merkmale der Einrichtung, Zusammensetzung der betreuten Kinder und des beschäftigten Personals. Öffentliche und kirchliche Träger auf der einen, sowie nicht-kirchliche und privat-gewerbliche Träger auf der anderen Seite, zeigen allerdings Ähnlichkeiten in diesen Merkmalen. Nicht-kirchliche und privat-gewerbliche Anbieter betreuen eine größere Altersspanne von Kindern und bieten längere Betreuungszeiten sowie vergleichsweise kleine Gruppen an. Zudem beschäftigen diese Anbieter tendentiell mehr Personal mit akademischer Ausbildung als öffentliche und kirchliche Träger. Vor allem Elterninitiativen, die knapp ein Drittel der Einrichtungen unter nicht-kirchlicher Trägerschaft betreiben, und privat-gewerbliche Anbieter scheinen auf den Bedarf an Plätzen für unter Dreijährige reagiert zu haben. So bieten sie beispielsweise oft Ganztagesplätze an, was vor allem den Bedürfnissen berufstätiger Eltern nach flexiblen Betreuungsmöglichkeiten entgegenkommen könnte.

Non-technical summary

Expanding institutional childcare is a widely used instrument in order to increase a country's level of fertility and female labour market participation. An adequate provision of institutional childcare makes it easier for couples to have children, to return to work after birth, and to combine childcare and career responsibilities. Increasing childcare provision is especially relevant for Germany as the number of institutional childcare places for children under three is low in international comparison. New political attempts in German family and education politics are aimed at increasing childcare availability until 2013 in a way that meets parental demand. That is the first time that political attempts (the so called Kinderförderungsgesetz) explicitly consider all different kinds of providers. In particular, politicians are debating about lowering the entry barriers for for-profit providers. This paper uses newly available data from the Child and Youth Welfare Survey 2006 to provide an overview on the status quo of the German market for childcare from a providers perspective.

As the results show, the providers on the German market for childcare differ with regard to centre, child and staff characteristics. It seems that public and religious providers on the one hand and non-religious and for-profit providers on the other hand tend to be similar. Non-religious and for-profit providers tend to respond more adequately to customer demands by serving a large age range, if necessary for long hours, in smaller groups and with a larger share of personnel with a university education. Thus, especially for-profit providers and parent cooperatives, which run about one third of the non-religious centres, seem to fill the gap in places for children under three and to meet parental needs with regard to full-day care and flexibility of opening hours.

Institutional Childcare — An Overview on the German Market

Grit Muehler*

September 22, 2008

Abstract

Institutional early childhood education and care can be funded and delivered in various ways relying on both the public and the private sector. The provision of childcare ranges from public operation to mixed markets with public and private providers to considerably marketised systems with predominantly private providers. One of the countries with a mixed childcare system is Germany where most of the childcare centres are operated by local authorities and non-profit organisations. Using newly available statistical data this paper provides a descriptive overview on the market for childcare in Germany from a providers' perspective. It answers the question if providers differ systematically with regard to centre characteristics, staff employed or the children taken care of. As the results show, the differences in operation affect many dimensions, nevertheless non-religious and for-profit centres on the one hand as well as public and religious centres on the other hand tend show similar characteristics.

Keywords: institutional childcare, provision, public and private sector
JEL-classification: J13, H44, L33

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1 Introduction

Expanding institutional childcare is a widely used instrument in order to increase a country's level of fertility and female labour market participation. An adequate provision of institutional childcare makes it easier for couples to have children, to return to work after birth, and to combine childcare and career responsibilities (OECD 2006*b*). Furthermore, there is rising interest in early education and its contribution to the development of young children. The early formation of skills ensured by high-quality pre-school childcare may not only extend the period of investment in human capital but may also positively impact later returns to education (Cunha et al. 2006). Increasing childcare provision is especially relevant for Germany as the number of institutional childcare places for children under three is low in international comparison. In 2007, only 14 out of 100 children are attending institutional childcare (Statistisches Bundesamt 2008). New political attempts in German family and education politics are aimed at increasing childcare availability until 2013. That is the first time that political attempts explicitly consider all different kinds of providers. In particular, there is a debate to lower the entry barriers for for-profit providers. Up to now, nearly all German childcare places are provided by municipalities or non-profit providers such as non-governmental organisations and churches. Only 1% of the market is covered by for-profit providers. This paper makes use of newly available statistical data and provides a descriptive overview on the current market situation for centre-based childcare in Germany.

The countries surveyed by the OECD show various mixes of public and non-public provision of centre-based childcare. Public childcare comprises childcare provided by either central or local public authorities. The non-public sector comprises various providers with both for-profit and non-profit business models. Typical non-profit providers (voluntary and community sector) are churches and other religious organisations, charities and other non-profit organisations as well as parental and community cooperatives. Typical profit making providers (private sector) are either sole traders, companies operating a few centres or big corporate chains which are rather typical for Anglo-Saxon countries as the U.S. and Australia.[1] Thus, in terms of provision, childcare markets in different countries range from purely public operation to considerably marketised systems with predominantly for-profit providers. None of these systems is free from imperfections. Regarding accessibility marketised systems quickly react to growing or declining demand but ensuring quality comes at extra cost. Furthermore, markets tend to separate providers in a way that for-profit providers with a strategy of quality differentiation settle in rather urban areas

[1] These non-public profit making providers are often referred to as private providers although this term is confusing as it also applies to the group of non-public suppliers of childcare services. In this paper I will try to avoid any confusion by using the terms public, non-profit and for-profit to distinguish between the different providers.

(thick markets) than in rural areas (Cleveland & Krashinsky 2005, Noailly et al. 2007). On the other hand, public systems might face shortages in availability but can ensure affordability and high quality through public operation and funding. In between there are mixed-market systems with both public and private providers. Germany is one of the countries with a mixed childcare system. The advantage of analysing such a country is that all the providers which are observed internationally can be compared within the same market. As there are several countries relying on mixed systems (see section 2) and quite a few countries are currently confronted with severe changes in the organization of their childcare market (see e.g. Noailly et al. (2007) for the Netherlands) the information provided here is of general interest.

In this paper, I employ newly available data from the Child and Youth Welfare Survey 2006 to provide an overview on the German market for childcare from a provider's perspective. The German data is particularly valuable, as it allows to characterise the providers in more detail than simply distinguishing between for-profit and non-profit status. It allows to differentiate between public, non-religious, religious and for-profit providers. My results show that, although licensing regulation is largely similar throughout the country, providers differ substantially with regard to centre, child and staff characteristics. Non-religious and for-profit providers tend to respond more adequately to customers demand compared to public and religious facilities. They serve larger age ranges, if necessary for longer hours, in smaller groups and with a larger share of personnel with a university education.

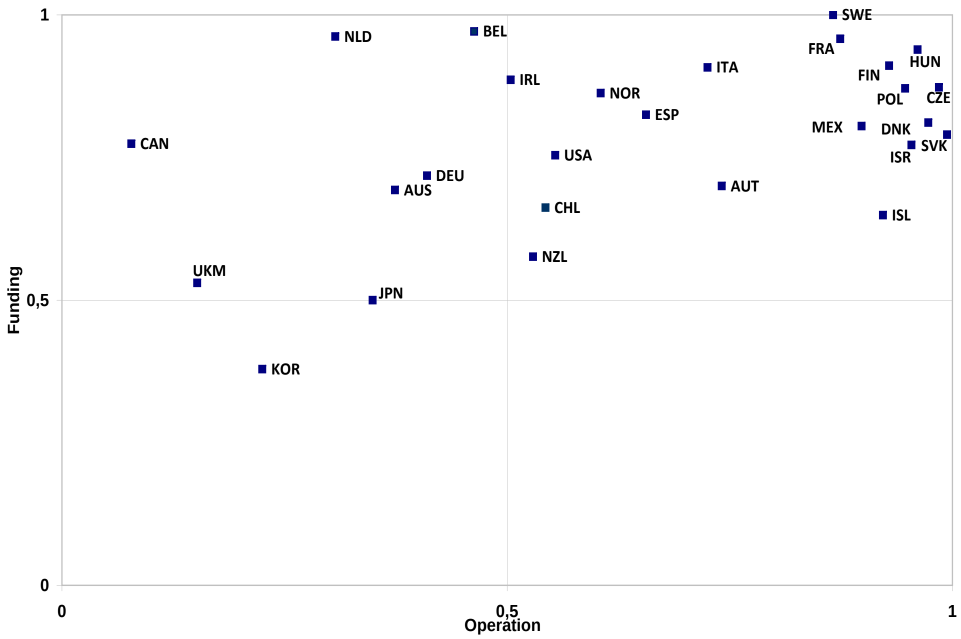
The paper is structured as follows. Section 2 gives an overview on the involvement of public and non-public bodies in the provision and funding of childcare and classifies the different types of childcare systems. The structure of the German market for childcare is then described in section 3. Section 4 gives an overview on the data, section 5 characterises the different providers in the German mixed market. Section 6 concludes.

2 Public involvement in childcare funding and provision

Early childhood education and care can be funded and delivered in various ways relying on both the public and the private sector. Childcare is a traditional public good whose consumption may yield educational benefits to the child and allows parents to work (Cleveland & Krashinsky 2003). Moreover it reduces criminal behaviour and improves the health of children from disadvantaged family backgrounds (Belfield et al. 2005). Funding can thus come from both, public and private sources.[2] In most countries, government funding is

[2] Funding here means the allocation of costs between public and private bodies.

Figure 1: Public involvement in childcare funding and operation in different countries



Data on funding (vertical axis) refer to the financial year 2003 (OECD 2006*a*, p.219). Shares of public and private expenditure on educational institutions are the percentages of total spending originating in or coming from the public and private sectors. Data on provision (horizontal axis) refer to the school year 2001/2002 (UNESCO 2004, p.362). The public or private proportions refer to the percentage share of children from age 3 to school entry enrolled in a pre-primary institution that is operated by a public or private authority. See also Table A.1 in the appendix.

the predominant source of funding, which confirms the perception of early childhood education and care as public good with positive externalities (e.g. better health status or less criminal behaviour) which are not fully covered by the parent's willingness to pay. However, public funding does not automatically mean that the institutions are operated by public authorities. Although depending largely on public funding the provision of childcare can be organized by public or privately managed centres. Figure 1 indicates the extent of public involvement in funding and the operation of childcare services in different countries for children older than three (see also table A.1 in the appendix).

Note that in most of the countries funding comes to more than 50% from public sources. But there are differences between countries regarding the operation of childcare institutions. Countries can be grouped into three types of childcare provision: predominantly public systems (countries on the right, e.g. Sweden, France, Denmark), mixed childcare systems (countries in the middle, e.g. Germany, U.S., Ireland) and marketised systems (e.g. Canada, UK, Netherlands). Public systems are characterized by a (nearly) 100% operation of childcare institutions by the government or local authorities. This type of childcare system is also observed in France and most of the eastern European countries. Mixed systems are characterized by almost equal shares of childcare centres which are managed by the state and non-public institutions. The institutions belonging to the non-public sectors are often non-profit welfare organizations, churches and for-profit private providers or companies. Mixed markets are observed in e.g. Canada, the Netherlands, Australia, the UK, and Germany, for example. A country with a marketised system of childcare largely relies on private providers, often with a for-profit status. In this case, costs of childcare are almost entirely paid by the parents.

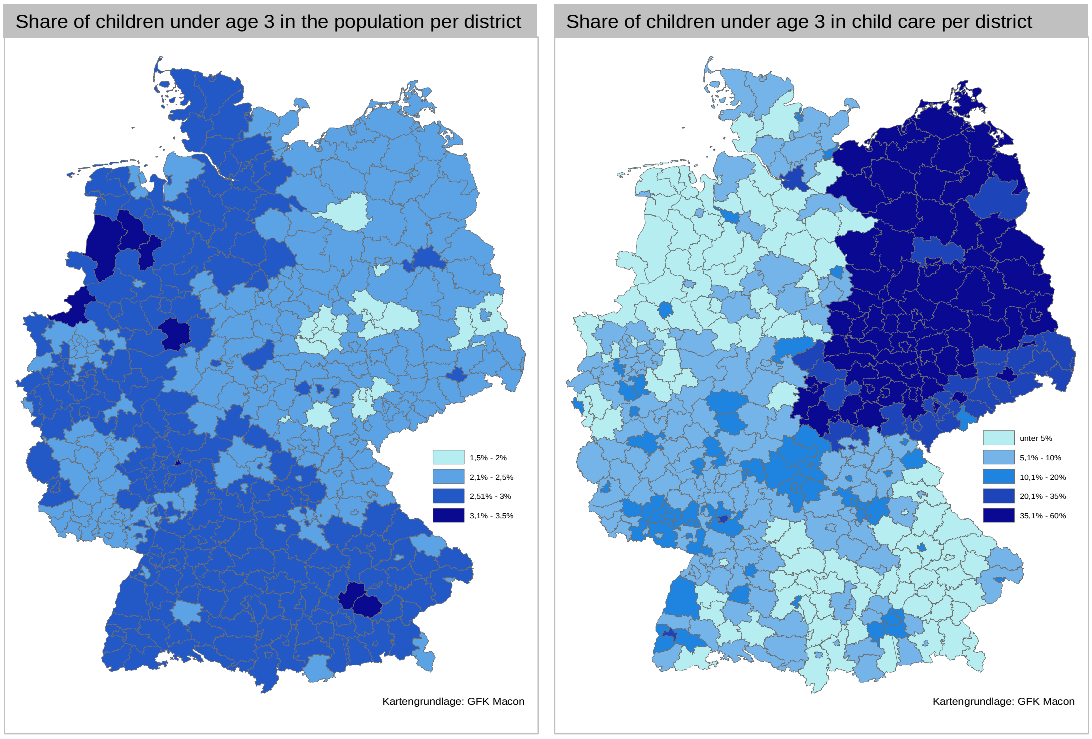
3 Childcare provision in Germany

The different types of centre-based care and the share of German children attending them are distinguished according to age groups. There are separate institutions for infants and toddlers up to the age of three ("Kinderkrippe"), others for children from age three to age six ("Kindergarten"), which is the compulsory school age, and yet others for out-of-school care from age seven up to age 14 ("Kinderhort"). In the last few years many federal states in former East Germany overcame this splitting in favour of age-mixed childcare settings ("Kindertagesstätten") which may cover two to all of the age groups mentioned before, while in West Germany the classical kindergarten is still the dominant childcare setting. The coverage rate of childcare also differs considerably between East and West Germany in particular for children under age three (see figure 2). Whereas in the five federal states of former East-Germany on average 37% of the under three year olds attend an institutional childcare centre or public day care setting, this share is considerably lower in West-Germany with around 8%.[3] In the age group of three years to school entry, coverage rates are much higher as children are legally entitled to childcare from age three on. Around 89% of the German children in this age group attend institutional childcare or public day care (Statistisches Bundesamt 2008). As the figure shows, the regions where the under three-year olds are born and live overlap rarely with regions where the level of childcare provision is high.

Regarding the providers, the diversity of combinations of funding and provision which can be observed globally can also be observed within the German market. Child care spaces fall under the auspices of public as well as non-public providers and are funded predominantly by local authorities and to around 30% by parents (BMFSFJ 2004, p.78). In the case where a centre is not operated by local authorities, the governing organisation covers 10% of costs by own resources (BMFSFJ 2004, p.78). Concerning regulatory issues, a uniform licensing standard applies to all child care centres. Although these regulations only focus on structural patterns such as space and staff-child ratio, they impose basic quality standards which cannot be undercut by providers, regardless if they receive public funding or not. There are four major types of providers operating in the German market:

[3] The number of children in public day care other than institutional childcare is a very small. In East-Germany on average 3.6% of the children are in public day care, in West-Germany it is 1,7% (Statistisches Bundesamt 2008). Note that these figures do not cover informal care arrangements.

Figure 2: Share of children under age 3 in the population and in childcare



The map on the left displays the share of under 3-year old children in the population of the respective district. The map on the right refers to children in childcare centres and public day care per 100 children per district. Source: Child and Youth Welfare Survey, part III.1/III.3, 2006.

- **public centres** Centres which are under the auspice of and operated by municipalities and other local authorities. They amount to 17,759 centers, or 37% of the market. Their financing comes predominantly from public sources, around 30% of the costs are carried by parents.

- **non-religious centres:** These are centres which are managed by private, non-religious institutions mainly welfare organisations which are eligible for public funding. Nearly all centres operated by parent cooperatives fall under the auspices of welfare organisation. They amount to 12,131 or 25% of the market.

- **religious centres:** These are centres which are managed by religious institutions or churches and are eligible for public funding as well. The number of religious centres in Germany amounts to 17,775 religious covering 37% of the market.

- **private, for-profit centres:** These are privately run and privately financed centres which are not eligible for public funding when operating with a for-profit status. These can be single entrepreneurs, larger childcare companies operating like small chains or centres run as parts of companies for the children of employees. Their proportion in the German market is rather low with 536 centres or a 1% market share. There are high entry barriers stemming from the public funding policy which requires non-profit status to be eligible for public money.

There are several reasons for the development of a welfare system with different providers. A mixed system of childcare such as the German one is often deeply rooted in a countries' history (see Bode (2003)). In particular, childcare in conservative welfare states has its origins in civil society and private charity rather than in governmental responsibility. Consequently, parental responsibility and the principle of subsidiarity are still the main sources of diversity in supply. However, there are several other reasons that explain this development. The first most often cited reason is that people will start to seek places outside the public sector when they cannot obtain places in public educational institutions (excess demand hypothesis, see e.g. Weisbrod (1975), James (1993)). The demand for non-public education is therefore greater the larger the total demand for education and the smaller the capacity of the public sector is. Furthermore, we may assume that some people prefer diversity. If one supposes that the public sector is relatively uniform (and the public and non-public sector are imperfect substitutes), cultural heterogeneity caused by religion, language or nationality of the parents might create a differentiated demand for non-public spaces. Moreover, a low quality public system might stimulate the demand for a higher quality non-public offer for those who are willing to pay the price. One reason which is particularly relevant for the German system is the structure of financing as already explained above. From the government's perspective, the operation of childcare facilities by non-public providers should be less expensive than public operation as the providers himself partly carries the costs.

4 Data

The data used for the analysis are part of the Child and Youth Welfare Survey collected by the German Federal Statistical Office in 2006 [4]. It contains information on centres as well as child and staff characteristics obtained through a questionnaire delivered to the centre management.[5] Table 1 displays the most important centre, staff and child characteristics that were collected.

Apart from the type of provider, the centre size, group size and occupancy rates of each centre are known. Moreover, I can identify more detailed information on the organisation of the centre. Around 8% of the German childcare centres are run by parents. They are operated by a parent board and about one third is associated to a larger non-profit organization. Second, some of the non-profit centres do predominantly offer places to

[4] Statistik der Kinder- und Jugendhilfe, Teil III.1: Kinder und tätige Personen in Tageseinrichtungen.

[5] The data collection is done on a yearly basis as a full survey where all institutions and centres providing care in Germany are obliged to disclose. Record date was march 15, 2006.

children of employees in nearby companies. They become eligible for public funding when offering a part of their places to the public. The operation by parents and the share of centres offering places to companies are known from the data.

Table 1: Variables of interest

centre characteristics	child characteristics	staff characteristics
number of children	gender	gender
number of groups	age	age
group size	immigration background	education
occupancy	special needs	occupation
operation by parents	daily care intensity	weekly working hours
places used by companies	lunch in centre	regular/second occupation
N=48,201	*N=2,954,928*	*N=415,018*

Source: Child and Youth Welfare Survey, 2006.

In addition to the information on the centre level, the data cover all children and employees in the centre. Regarding child characteristics, I can observe whether the parents are of non-German origin and, if so, whether German is spoken at home. I also observe if the children have special needs due to physical or intellectual disabilities or learning difficulties. The normal care intensity is observed in the following hours schemes: up to 5 hours, 5–7 hours, 7–10 hours and more than 10 hours a day. There is also information whether the child receives lunch. The childrens' ages vary from zero up to 13 years as some centres do not only offer pre-school but also after-school care in the afternoon for children who are already in primary or secondary school. As for the personnel, the data contain information on maintenance staff (59,308) and pedagogical staff (355,710). More detailed information is provided for the latter. The dataset contains variables such as gender and age as well as education, occupational status and whether the employment in the centre is a regular (main) or a second occupation.

5 Characterizing the providers

The data on centre, child and staff characteristics are used to compare the different providers in a descriptive way. Table 2 gives a comprehensive overview on the features observed at the centre level and their mean values for different providers. Regarding centre characteristics the main differences concern centre size and group size. In terms of the number of children, public centres are on average nearly twice as large as for-profit centres. As this might be due to serving more children on fewer hours a day a more suitable instrument for a comparison in terms of centre size would be the number of hours of care.[6] This fact is also reflected in the number of groups. Public and non-profit centres have around three groups per centre. For-profit centres have on average two. Considering group size, for-profit centres have considerably less children per group than public centres.[7] The share of care spaces which are similar to kindergartens is highest for the group of for-profit providers. These are licensed centres with lower regulatory requirements such as play groups and parent-child-groups. Thus, they might be more often privately initiated. Parent-run centres are often under the auspices of non-religious welfare organizations and centres offering places to companies are mainly for-profit.

Table 2: Centre characteristics for different auspices

	public	non-religious	religious	for-profit
number of children	64.3	54.6	63.7	33.0
number of groups	2.9	2.8	2.8	1.8
group size	20.3	18.1	22.2	14.8
occupancy	91.1 %	94.7 %	95.8 %	95.4 %
share of				
play groups	11.2 %	18.3 %	9.6 %	28.2 %
inclusive	23.8 %	29.6 %	29.0 %	12.5 %
parent-run	0 %	28.8 %	0.6 %	5.0 %
company-usage	0.3 %	1.3 %	0.2 %	9.7 %
N	*17,759*	*12,131*	*17,775*	*536*
share	*36.8%*	*25.1%*	*36.9%*	*1.1%*

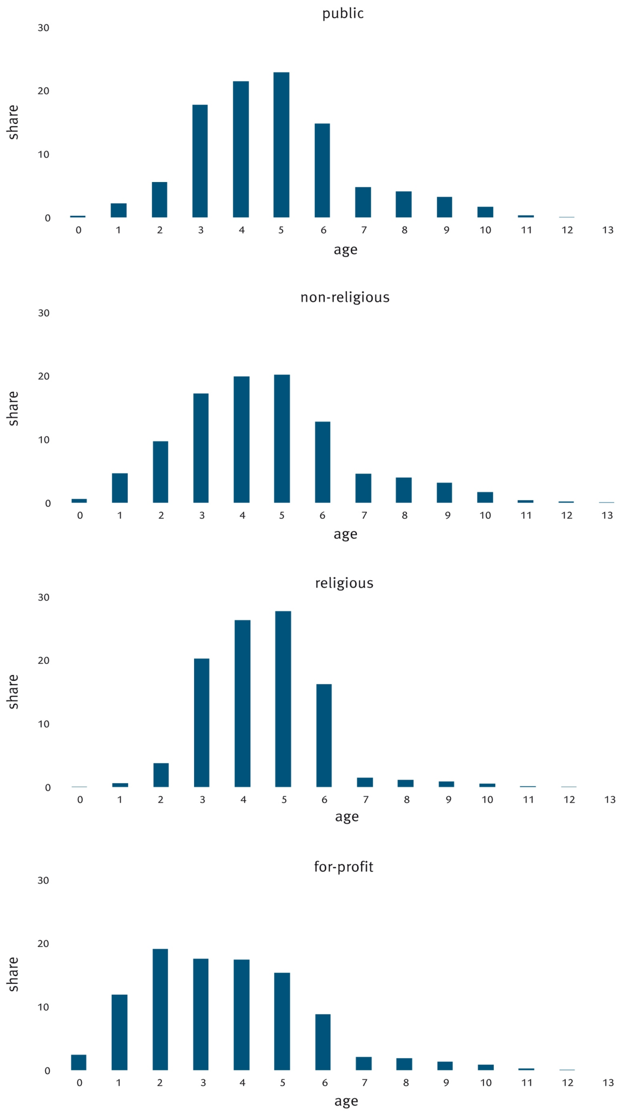
Source: Child and Youth Welfare Survey, 2006, own calculations.

Do these characteristics now translate into differences in the groups of children attending an institution? The main indicators here are age groups, immigrant origin and daily care intensity. Concerning the age groups, centres vary substantially (see figure 3). Due to the German legislation, which guarantees a place in a childcare facility for children from age three upwards, the largest age group served by all providers are children from 3 to 6 years of age. Religious centres only serve a very narrow range of age groups and provide only very few places for e.g. under three year olds whereas in for-profit centres 17% of the places are occupied by children from that age group. For-profit centres thus seem to respond to the excess demand for places in that age category (Wrohlich 2005). On the other end of the age range are school children who receive additional care before or after school. These

[6] But as public centres do also have more employees and about the same average group sizes it seems likely that they are also much larger when measured as hours of care provided.

[7] This finding reflects the different age ranges, which are bound by different regulations concerning group size, are covered by the different providers.

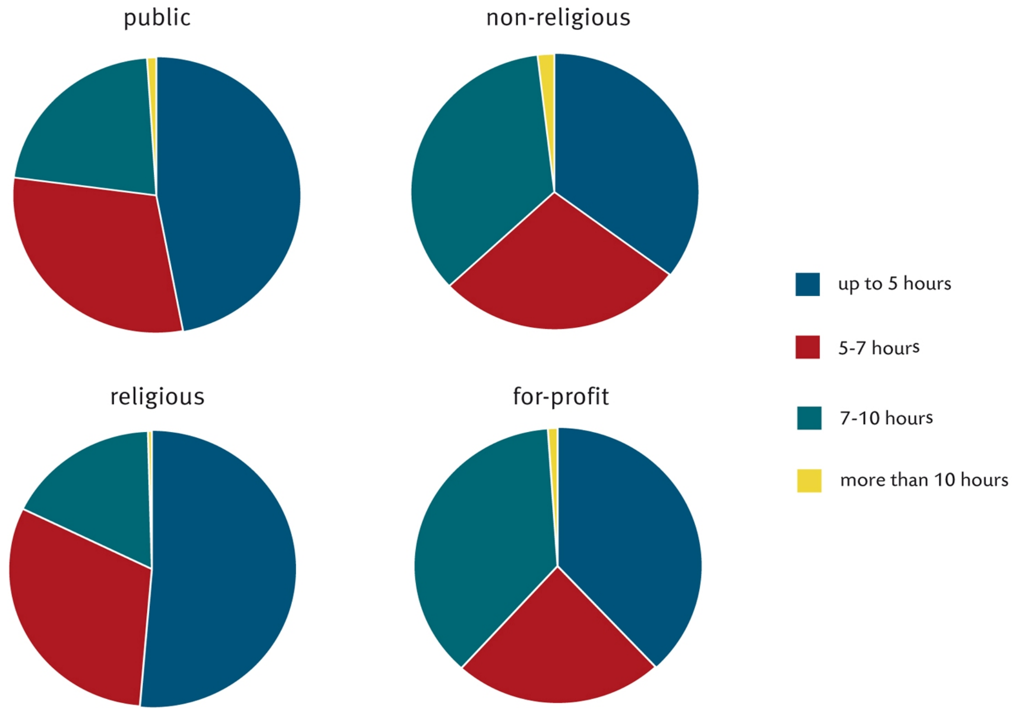
Figure 3: Distribution of child age by auspice



Source: Child and Youth Welfare Survey, 2006, own calculations.

children are much more often served by public and non-religious facilities (at each type around 16% of the children) and also very rarely by religious centres. Immigrant children occupy around one fifth of the places at all providers, where religious centres show with 24% a somewhat higher rate, and non-religious as well as for-profit providers show slightly lower rates (see Table A.2 in the appendix). In addition, religious centres also have a slightly higher share of immigrant children who do not speak German at home. Regarding places occupied by children with special needs, there is not much variation between the different providers. Places taken by children with special needs amount to two to four percent of all children served by a provider. Regarding care setting, all types of providers rely mostly on same-age groups. Only in for-profit facilities a larger share of children attends aged-mixed groups.

Figure 4: Care intensity by auspice



Source: Child and Youth Welfare Survey, 2006, own calculations.

There are more differences between the providers regarding the daily care intensity and the provision of lunch. Looking at the daily care intensity, we observe that in particular non-religious and for-profit providers open longer hours (see figure 4). In public and religious centres, only one fifth of the children are served for more than 7 hours whereas in non-religious and for-profit centres this share is nearly twice as large. Consequently, these providers have a higher share of children having lunch in the centre. Almost three quarters of the children in non-religious and for-profit centres have lunch at the facility whereas in religious centres this is only the case for 37%.

This is partly due to the age structure of the children attending these institutions. Although this is considerably less often the case in institutional day care, children under age three are taken care of for much longer hours compared to children above age three. Nearly 60% of the children who are a few months old or one year of age and still 45% of these of age two are served for more than seven hours a day. This seems to support the hypothesis that childcare for children below three is motivated much more by maternal labour market participation than by educational considerations. Thus, children below age three are much more often cared for throughout the full-day compared to children aged three and above. Regarding the staff, there are not many differences between the providers (see Table 3). The share of women is above 90% at all facilities, the average staff-age is around 40 years and the average weekly working hours amount to around

30. On the contrary, regarding staff assignment, there are again substantial differences between the providers. The number of staff per group is around two for each provider. But as public and religious centres tend to have larger groups (see Table 2) the child-staff-ratio, which is the number of children per staff person with a completed pedagogical education (vocational training and/or university), is considerably higher than under non-religious and for-profit auspice. This is of course partly due to the age structure of the children. For children of the age group 3-6 years, the child-staff-ratio required by law is higher compared to younger children. Since e.g. religious centres serve mainly children in that age group (see figure 3) one teacher is responsible for a larger number of children. The number of educated staff per group is around two for all the providers. But in terms of education of the pedagogical staff, public and religious centres tend to employ much less often teachers with a university education than non-religious and for-profit centres do. In non-religious and for-profit centres, 6.5% respectively 8.3% of the pedagogical staff has a university degree[8] whereas in public and religious centres this number is only 3.2%. As the overall figure is quite low, one might assume that there is only one person with a university education per centre. This person might be the responsible manager of the centre. Furthermore, if one assumes that these people are spread equally over all centres, nearly half of the for-profit centres would have at least one person with an academic qualification whereas only one quarter of the public centres would have one.

Table 3: Staff characteristics for different auspices

	public	non-religious	religious	for-profit
share of women	96.1 %	92.3 %	94.8 %	93.4 %
average age	40.8	39.8	39.2	38.2
av. weekly working hours	29.8	29.6	28.0	28.5
number of staff per group	1.9	2.0	2.2	2.0
child-staff-ratio	9.5	8.4	9.8	7.5
staff with university degree	3.2 %	6.5 %	3.2 %	8.3 %
N	*149,916*	*106,778*	*155,060*	*3,264*
share	*36.1%*	*25.7%*	*37.4%*	*0.8%*

Source: Child and Youth Welfare Survey, 2006, own calculations.

6 Conclusion

The question of how to organize a country's system of childcare is gaining growing political importance these days as a lot of attention has shifted towards the early years of childhood.

[8] University degree here is defined as having at least a degree of a university of applied sciences or higher in a relevant subject such as educational science, psychology, teaching or medicine.

The aim of this paper was to give an overview on the market for childcare in Germany and to provide information about a mixed childcare system from a provider's perspective.

This preliminary analysis seems to support the hypothesis that a non-profit market structure cannot "per-se" ensure a comparable level of quality throughout a country. As the mean comparisons show, the providers differ substantially with regard to centre, child and staff characteristics regardless of the fact that there are minimum quality regulations which are binding for all providers. Furthermore, it seems that public and religious providers on the one hand and non-religious and for-profit providers on the other hand tend to be similar. Regarding the results, non-religious and for-profit providers tend to respond more adequately to customer demands by serving a large age range, if necessary for longer hours, in smaller groups and with a larger share of personnel with a university education. Thus, especially for-profit providers seem to fill the gap in places for children under three and to meet parental needs with regard to full-day care and opening hours flexibility. The results do not indicate that immigrant children or children with special needs are more often cared for in non-profit establishments.

One advantage of the German system is that, contrary to most international data, the structure of the market allows to distinguish between the governing organization and the actual operational responsibility. Despite under the auspice of e.g. a non-religious provider, the centre itself can be operated by parents or companies. This allows to asses the relationship between provider and sponsor and their impact on the provision of quality.

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A Appendix

Table A.1: Public involvement in childcare funding and provision in different countries

country	country code	share of public funding	share of public provision	comments
Australia	AUS	0.717	0.374	based on Rush (2006) the share of public centres is 0,306 in 2004
Austria	AUT	0.700	0.741	according to Statistik Austria (2008*a*) the share is 0.616 counted on centre level, 0,666 counted on children enrolled; funding based on Statistik Austria (2008*b*) is 0.828
Belgium	BEL	0.971	0.463	
Canada	CAN	0.774	0.078	share of public provision based on OECD (2004*a*) is 0.071
Chile	CHL	0.662	0.543	
Czech Republic	CZE	0.873	0.985	
Denmark	DNK	0.811	0.973	share of public funding based on OECD (2001) is 0.800 in kindergartens
Finland	FIN	0.911	0.929	share of public provision based on OECD (2004*b*) is also 0.929
France	FRA	0.958	0.874	share of public provision based on OECD (2004*c*) is about 0.800
Germany	GER	0.718	0.410	
Hungary	HUN	0.939	0.961	share of public provision based on Eurybase Hungary (2006) is 0.952
Iceland	ISL	0.649	0.922	
Ireland	IRL	0.886	0.504	
Israel	ISR	0.772	0.954	
Italy	ITA	0.908	0.725	
Japan	JPN	0.500	0.349	share of public provision based on JETRO - Japan External Trade Organization (2005) is 0.536 (counted on centre level)
Korea	KOR	0.379	0.225	share of public provision based on OECD (2004*e*) is 0.217
Mexico	MEX	0.805	0.898	same figure of provision in OECD (2004*d*)
Netherlands	NLD	0.962	0.307	
New Zealand	NZL	0.576	0.529	
Norway	NOR	0.863	0.605	
Poland	POL	0.873	0.947	
Slovakia	SVK	0.790	0.994	share of public provision based on Eurybase Slovakia (2006) is 0.97
Slovenia	SLO	0.811	0.990	
Spain	ESP	0.825	0.656	
Sweden	SWE	1.000	0.866	share of public provision based on Swedish National Agency for Education (2006) is 0.835 (pre-school activities of children over 3); share of public funding in pre-schools is 0.92
United Kingdom	UKM	0.530	0.152	the figure for public provision is based on DfES - Department for Education and Skills (2006) and the figure for public funding is based on National Audit Office (2004)
USA	USA	0.754	0.554	

Sources: Data on Funding OECD (2006*a*), financial year 2003; Data on provision: UNESCO (2004) children enrolled in school year 2001/2002 (except of data for United Kingdom)

Table A.2: Child characteristics for different auspices

	public	non-religious	religious	for-profit
average age	4.8	4.6	4.5	3.6
age group				
0–2 years	8.3 %	15.2 %	4.6 %	33.6 %
3–6 years	77.0 %	70.2 %	90.6 %	59.4 %
7–14 years	14.7 %	14.6 %	4.8 %	7.0 %
in school	16.6 %	16.2 %	5.3 %	8.3 %
immigration background	22.8 %	17.5 %	24.1 %	19.7 %
special needs	2.0 %	4.2 %	2.3%	2.3 %
lunch in centre	53.4 %	73.8 %	36.8 %	74.0 %
daily care intensity				
up to 5 hours	47.0 %	35.2 %	51.3 %	38.1 %
5 to 7 hours	30.1 %	27.8 %	30.8 %	23.6 %
7 to 10 hours	21.9 %	35.0 %	17.4 %	37.2 %
more than 10 hours	1.0 %	1.9 %	0.4 %	1.1 %
care setting				
same-age group	84.4 %	77.9 %	87.4 %	68.8 %
mixed-age	15.6 %	22.1 %	12.6 %	31.2 %
N	*1,142,728*	*662,461*	*1,132,054*	*17,685*
share	*38.7%*	*22.4%*	*38.3%*	*0.6%*

Source: Child and Youth Welfare Survey, 2006, own calculations.