More Parental Choice in Europe? Overview of Effectiveness Differences between Religious Schools and Public Schools in Several European Societies.

One of the assumptions of the debate over parental choice is that private schools are more effective than public ones. This paper reviews the available evidence that religious schools in Europe are more effective. Available studies compare outcomes of public and religious schools in Flemish Belgium, France, Germany, Hungary, the Netherlands, and Scotland. Findings suggest that differences in school success and cognitive qualification exist between public and religious schools in France, Hungary, the Netherlands, and Scotland, and these differences cannot be explained by different social composition of these schools or by other obvious social characteristics of pupils, parents, schools, or neighborhoods. These differences in effectiveness are less clear in Germany, though there are some indications of a higher effectiveness of German religious schools. However, differences in noncognitive achievements are not found in Flemish-Belgium and found only partly in Germany. The indications are that public and state-funded religious schools give parents a real choice between schools of different quality. (Contains 24 references.) (DFR)
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Abstract

One of the assumptions of this ‘parental choice’ debate is that private schools are more effective than public ones. The aim of this paper is to review the available evidence of this higher effectiveness of religious schools in European societies. This is important for a non-European audience because European educational systems with public and religious-subsidized school sectors are a better place to test this basic assumption. The available studies compare outcomes of public and religious schools in Flemish Belgium, France, Germany, Hungary, Netherlands and Scotland. Effectiveness differences in school success and cognitive qualification exist clearly between public and religious schools in France, Hungary, the Netherlands and Scotland and these differences cannot be explained by the different social composition of these schools or by other obvious social characteristics of pupils, parents, schools or neighborhoods. These differences in effectiveness are less clear in Germany, although there are some indications of a higher effectiveness of German religious schools. However, effectiveness differences in non-cognitive achievements are not found in Flemish-Belgium and only partly in Germany. The importance of the effectiveness differences in the cognitive domains indicates that educational systems with public and state-funded religious schools give parents a real choice between schools of different quality.

1. Introduction

Parental choice in education or parents’ free to choose their children’s school is a major topic in educational policy (CERI 1994). The introduction of more parental choice in educational systems is often advocated as a means to introduce competition for pupils between schools and thus improve the quality of teaching, decrease the level of bureaucracy in and around schools and reduce its costs (Chubb & Moe 1990). One of the assumptions of this ‘parental choice’ debate is that private schools are more effective than public ones. The aim of this paper is to review the available evidence of this higher effectiveness of religious schools in European societies. This is important for a non-European audience because European educational systems with public and religious-subsidized school sectors are a better place to test this basic assumption of the parental choice debate that private schools are more effective than the educational systems of the USA and England.

As argued in Dijkstra, Dronkers & Karsten (2001) the Dutch educational system with a choice between public and state-funded religious schools is not unique for continental Europe. Contrary to the situation in the USA and England, parents in a number of European societies can make a real choice between comparable schools, mostly between public and religious schools, without paying very high school fees for the latter schools. These religious schools are most often Catholic or Protestant schools operating within a national educational system.
receiving state grants. Only the size of the religious sector in relation to the public sector is
the uniqueness of the Dutch educational system.

This co-existence of public and religious schools within one national educational system is
the unintended result of three processes in these European societies: the struggle between the
state and the established churches in Europe; the fight between the 18th century anciens
régimes (mostly with one state-church and suppressed religious minorities) and the 19th
century liberal governments (which claimed to be neutral to all churches); and the emergence
of new social classes in the 19th century (skilled workers, craftsmen, laborers) which rejected
the dominant classes, either liberal or conservative. In several European societies (Austria-
Hungary, Belgium, France, German Länder, the Netherlands, Scotland) these processes had
more or less comparable results, with public and religious-subsidized school sectors, offering
parents a choice of schools with the same curriculum and usually at similar financial costs for
the parents. However, the size of these public and religious school sectors varies strongly
between and within these European societies for specific historic reasons, and religious
schools disappeared in some of these societies as a consequence of the communist regime
(OECD 1998: 139). These specific historic reasons are very important for understanding the
current educational systems of these European societies. We mention these specific reasons
briefly because of lack of space.

Despite the increasing irrelevance of church and religion in the everyday life of most
European societies, the religious schools in these societies have not dwindled away. Graph 2
from Eurydice (2000) illustrates this for the member states of the European Union for the
‘90s. On the contrary, the religious school sector in societies with relative inactive religious
populations is growing or is strongly over-represented. This is not only true for societies
which have such schools traditionally (Austria, Belgium, France, the old German Länder, the
Netherlands, Scotland), but also for those societies in which religious schools were abolished
during the communist regimes (Hungary, the new German Länder). One of the possible
explanations is that religious schools are generally more effective in their teaching than public
schools, because the religious schools no longer aim at religious socialization of the pupils but
still try to attain more non-cognitive goals with their education valued by irreligious parents.
There are additional explanations for the rise of religious schools in the former communist
societies (like Hungary or the new Länder of Germany): the distrust in the state as provider
of collective goods like education; the lower effectiveness of public schools as a consequence
of malfunctioning of state bureaucracy; a lower level of community building around the
public schools compared to the religious schools.

We shall summarize in this paper the available empirical research, which systematically
compares the cognitive and non-cognitive outcomes of primary or secondary public and
religious schools. We do not discuss comparisons between schools outside the state-funded
private sector (for instance Waldorf schools in Germany; anthroposophic schools in the
Netherlands; exclusive private schools in France; Italy; the exclusive private schools in
England), because these comparisons have the same disadvantages and drawbacks as the
comparisons between public and religious schools in the USA.

We have found research comparing outcomes of public and religious schools in Flemish
Belgium, France, Germany, Hungary, the Netherlands and Scotland.

2. Belgium
The Belgian constitution guarantees “the rights and freedom of ideological and philosophical
minorities”. These rights and these freedoms have been carefully protected since the
independence of Belgium in 1830 and have been the battleground of two “school struggles”
or “school wars” in the course of Belgian history (in 1870 and 1958; Witte et al., 1997). The
result of these conflicts has led to the establishment of a “schoolpact” between all parties. The original compromise implied that the state had the right and even the duty to establish religiously neutral schools on all educational levels. In exchange for the acceptance of this principle, the private schools (almost all Catholic) received state financing for the offered education. These rights and compromise ensure that parents will at least be able to decide whether they want a Catholic or a secular school, while in the larger cities other choices also are available. Education in Belgium can be organized with tax support by a variety of sponsors (‘networks’). Three ‘networks’ exist: community schools directly controlled by central government (that is the Flemish community since 1989), official schools directly controlled by provincial or local authorities, and free schools directly controlled by individuals and associations. Community and official schools are similar to the public schools elsewhere in continental Europe. The Belgian educational system is further differentiated by language, with completely separate structures for Dutch (Flemish) education on the one hand and for French and (a small minority) German education on the other hand. The ‘free’ schools which are not under the direct control of national, provincial, or local authorities are nearly all Catholic: in 1984 they accommodated somewhat fewer than half the students in the French- and German-speaking areas, but two-thirds of those in the Dutch-speaking areas. Under the same law private schools as well as provincial and locally controlled schools are subsidized by the national government, provided that they conform to program requirements and agree to inspection by the Ministry of Education. This inspection is confined to subjects taught and the language used, and may concern with pedagogical methods or the religious and philosophical basis of instruction.

Research on parental choice of public and religious schools in Flemish Belgium started with the study of Billiet (1977) on the motives of parents for choosing schools. The reasons which parents gave for selection of a public or a Catholic school related to the educational program of the school or to practical matters. Parental social class did not affect whether students attended public or Catholic schools. According to Billiet this doesn’t mean that the religious identity of the school is unimportant, but that it tended simply to be taken for granted in the selection process. Students ended up in Catholic schools because they and their families belong to a social milieu (values, norms, convictions, habits) where such a decision was almost automatic. The chance that children from Catholic families chose a Catholic school was 50% if their parents were not integrated into a Catholic community, but 97% if they were. Free-thinking liberals displayed an equally distinctive cultural pattern, and their children were very likely to end up in public schools (Billiet 1997). Thus differences in lifestyle and in moral convictions and behavior distinguish those who chose Catholic schools from those who choose public, secular schools in Flemish Belgium of the ’70s.

The effects of Belgian public and Catholic schools on the cognitive and non-cognitive achievements of the pupils have hardly been studied. One of the reasons for this absence is the political sensitive character of the “schoolpact”, which does not stimulate scientific research of its intended and unintended effects. A second reason for this absence is the major importance of another cleavage within Belgian society during the last quarter of the 20th century: the struggle between the Flemish Dutch-speaking North and the French-speaking South about the federal structure of Belgium. A group sociologists at the Vrije Universiteit in Brussels only recently started studies on the effects of Flemish public and Catholic schools on non-cognitive achievements (Elchardus, Kavadias & Siongers, 1999; Elchardus & Kavadias, 2000). They analyzed the differences in three attitudes between the pupils in secondary education: politically charged attitudes like ethnocentrism and authoritarianism and religiously delicate matters like sexual- and bio-ethical liberalism. Ethnocentrism is a blanket
term to indicate a form of cultural closeness. It indicates some form of orientation towards an 'in-group' and the rejection of 'out-groups' (in this case ethnic minorities like Turks and Moroccans\textsuperscript{10}). Authoritarianism is a form of the original measurement of anti-democratic trends in the authoritarian personality-study. The measurement focuses on the preferences for a repressive, violent reaction towards wrongdoers in Belgian society. Sexual- and bio-ethical liberalism gauges attitudes with regard to sexuality, sexual preference, prostitution, abortion, euthanasia, suicide and killing in self-defense (an adapted form of the index of the European Values Study). Table 1 summarizes the results from their multi-level analyses. Differences between the attitudes of pupils in public and Catholic schools are only found, if the level of secondary school is ignored. Before controlling for this characteristic, pupils in official schools (schools directly controlled by provincial or local authorities) score higher on ethnocentrism, on hard repression and on sexual & bio-ethical liberalism than pupils in the community schools (directly controlled by the Flemish community government) and in the Catholic schools. However, community schools and official schools provide technical and vocational education, which are lower ability school-types. If one controls for this difference, there is no difference in pupils' attitudes in public or Catholic schools. The analysis of Elchardus & Kavadias (2000) makes clear that Catholic schools in Flanders recruit from the higher social strata. The old single-sex Catholic schools offering only general education recruit more students from the upper-middle classes and the upper classes. This difference in recruitment and tracks, offered by single-sex Catholic schools, give also the explanation of the differences in attitudes between pupils of public and religious schools. From the point of view of religious socialization, Flemish Catholic schools have a far lesser impact than one would have expected, given the history of the Belgian educational system. Pupils from Catholic schools have more or less the same attitude towards abortion, euthanasia and homosexuality than their comparable counterparts in public schools. The major difference in pupils' attitudes is between different educational levels or school-types within secondary education (vocational, technical, general) within the different public and religious networks. This suggests that the division of Belgian society in terms of values isn't fostered any longer along religious lines, but according to a combination of achievement and ascription: the school-type with secondary education. The continuous success of Catholic schools for Flemish parents can be better explained by their success in offering the most valued school-type in secondary education to more or less religious pupils instead of a successful socialization of religious values.

3. France

The battle surrounding the relations between public, secular schools and the religious, Catholic schools dates from the more radical phase of the French Revolution in 1792. This battle continued during the 19th and 20th centuries and is strongly related to the political balance between the more conservative and religious right and the more radical and secular left. A description of these historical developments will not follow here (see Glenn, 1987 and Langouët & Léger, 1994), but it is important to keep this political connection in mind. The current relation between public and religious schools in France dates back to 1951, when two laws introduced a financial subsidy on a per-pupil basis to confessional education. The basis for the present system of public funding of Catholic schools was created by the Loi Debré\textsuperscript{11}, adopted at the start of the Fifth Republic in 1959, while the Loi Guermeur of 1977 extended it further\textsuperscript{12}. An additional blow to opponents of financial state support for religious schools was a ruling in 1977 that no constitutional barrier existed to prevent a secular state from funding religious schools.
The *Loi Debré* created a number of alternatives for private schools: 1. To continue completely independent of state intervention, subject to employing qualified teachers; 2. To accept state requirements as to curriculum and testing in exchange for staff salaries (*contrat simple*); 3. To accept, in addition, some state control over pedagogy and the selection of teachers, in exchange for operating expenses as well as salaries (*contrat d’association*). Most Catholic primary schools opted for the *contract simple*, while many secondary Catholic schools preferred the *contrat d’association* to meet their higher operating costs. While Catholic schools (about 93% of all private schools enrollment) are almost without exception taking advantage of one of the contract forms, most private non-confessional schools have remained outside these arrangements. The *Loi Guermére* strengthened the independence of religious schools under contract by giving the principal the possibility of refusing to consider hiring teachers whose convictions do not correspond to the school’s identity.

Table 2 gives the development of the percentage of pupils in primary and secondary French schools between 1960 and 1990, in total and separately. After a low point in the mid ’70s (16.2%) this percentage gradually recovered to reach 17.0% in 1990. There are strong geographical variations in participation in religious schools: less than 10% of pupils in the regions of Amiens, Dijon, Limoges, Nancy-Metz, Nice-Corse, Paris- Créteil-Versailles, Reims, Rouen and Strasbourg; more than 20% of the pupils in the regions of Clermont-Ferrand, Rennes and Nantes. This geographical distribution of religious schools is strongly connected with political and religious cleavages within France, dating back to the civil strife of the French Revolution.

The French sociologist Ballion (1982) argued that Catholic education is by no means an elite alternative, though the proportion of students from working-class homes in 1977 was 38.2% in public but only 21.3% in religious education. Children of professionals and higher level officials represented 9% of the students in public and 14.6% of those in religious education. However, the most prestigious secondary schools of all are the upper rank of public lycées, like Louis-le-Grand, Ravel and Jules Ferry in Paris.

Langouët & Léger (1994) have made the only comprehensive study of differences in effectiveness of public and Catholic schools in France. They found that the dropout rate between the first- and third-year classes of secondary schools of the French State sector was significantly higher than those of comparable students in the Catholic sector (34% versus 24%). Pupils from employee or manual laborer strata benefit more strongly from this positive effect of Catholic schools. The same holds for the dropout rate between the first- and the fifth-year classes in France: 61.5% in the state schools as opposed to 51.3% in the Catholic schools. The children from middle management and employee strata benefited most from this positive effect of Catholic schools. In the end, the graduation rate in the state sector schools is lower for comparable students (21.7%) than in the Catholic schools (28%). The great beneficiaries of the French Catholic schools are the children of employees, because their graduation rate in Catholic schools is practically equal to the rate of children of the middle management stratum in both the state and Catholic schools.

Langouët & Léger (1994; 140-144) summarize the results of their study by discussing seven wrong ideas on French religious schools.

1. Underestimating the percentage of pupils in religious schools by focusing on the percentage of pupils in religious schools in a certain year, because a large proportion of all French pupils (35% of the cohort of 1972-73-74; 37% in cohort 1980) attend religious schools on a temporary basis only.

2. Misunderstanding the real nature of those attending religious schools by confusing their educational motives with their religious ideals. Only a small minority chooses religious schools for religious reasons.
3. Assuming that the existence of public and religious sectors provides families with a free choice and that this freedom (together with the help-function of the religious school) promotes the educational democratization (decrease of social inequality within education; recruitment open to the lower classes). However, Languet & Léger make clear that many families do not have any choice, firstly due to geographical inequalities but also to social inequalities. Also the help-function of religious schools is more important for pupils from the more privileged classes and less important for pupils from the lower classes.

4. Idealizing the positive effects of the autonomy of schools and competition between schools of public and religious sectors on the quality of teaching and the level of achievements. However after controlling for social background of the pupils and the initial scholastic ability of pupils entering different schools, the differences between Catholic and public schools are much smaller, but still significant and different for pupils from different social groups.

5. Underestimating the differences of scholastic success of pupils from different social classes in public and religious schools: framers' children achieve better in public schools, while children from manual laborers class and employees achieve better in religious schools.

6. Portraying the present public school as democratic, social neutral and servicing all children without making distinctions between them. If public schools are more democratic by their recruitment than the religious schools, they are less democratic than the religious schools by creating larger differences in scholastic success between pupils from different social classes and the massive and early dropout of pupils from the working classes.

7. Assuming that the relation between the public and religious schools is stable and unchangeable. However, the social composition of the two sectors changed between 1973-1980 and 1980-1987 (in the sense of a democratization of the religious sector), the effects of both sectors changed during that period (the religious sector continued to do much more to reduce social inequalities in scholastic success than the public sector), and the strategies of the different social classes also changed in that period (children from professionals and higher levels officials increased their participation in public education, while children from other classes increased their participation in religious schools).

4. Germany

A majority of public and a minority of religious schools co-exist in all Länder or states of Germany. In the German Federal Republic, the State has the first and primary responsibility to establish and maintain public schools everywhere, but there is also a guaranty in the basic law (article 7, section IV of the German Constitution) for the private schools. Private schools are allowed if the goals, organization and teachers are on a par with those of the public schools and on the condition that no pupils may receive special treatment based on income and wealth. Private schools are only allowed if they have a special pedagogical, religious or philosophical basis (section V of the German Constitution). The schools must also accept the right of the state to supervise them. This guaranty has been upheld by the Constitutional High Court of the German Federal Republic (Bundesverfassungsgericht): "private schools have an independently organized teaching, specially in relation to their goals, their religious and philosophical basis, their teaching methods and content". As a consequence, the German ministers of education of the Länder decided on 10 and 11 September 1951 that private schools in Germany are allowed if their internal and external organization is equivalent to that of the public schools, but this organization of private schools need not to be identical to that of public schools. The same holds for the teachers, whose didactic, pedagogical and subject training should correspond with those of teachers in comparable schools (Friedeburg in: Goldschmidt & Roeder, 1979: 41). The State awards private schools with many forms of funding, although the degree and the conditions that apply differ from state to state and from school type to school type (Vogel in: Goldschmidt &
Roeder, 1979: 131-145). This can be seen in table 3, which shows the percentages of private schools of the total number of schools in three German states (Mecklenburg-Vorpommern, Nordrhein-Westfalen & Sachsen-Anhalt) and in the whole of Germany for the different school types in secondary education for the school year 1992/1993 (Statistisches Bundesamt, 1994). Table 4 shows a slow increase of the percentage of pupils at German private schools after a lowest point in 1975.

Three studies on the cognitive and non-cognitive effectiveness of public, Catholic and Protestant schools in Germany (both in the old and new Länder) are less conclusive but they provide some indications of a higher effectiveness of religious schools.

4.1. Grammar schools in Nordrhein-Westfalen
Dronkers & Hemsing (1999) analyzed the educational attainment of 3,240 grammar school pupils of the 10th class in Nordrhein-Westfalen in 121 school classes at 68 grammar schools (Gymnasium). The University of Cologne interviewed them for the first time at the age of approximately 16 years in 1970. This primary sample is socially selective because the German grammar school (Gymnasium) recruits its students from higher social strata disproportional. All pupils were asked about their social background, their attitudes to school, and their educational plans. In addition their intelligence were measured with Amthauer's intelligence-structure-test. The students’ parents and teachers were also interviewed in 1970. We also have information about the schools concerned by interviewing the principals of the schools and analyzing statistical information. In 1985, 61% (1,989) of these pupils at the age of approximately 30 years were reinterviewd by the University of Cologne. The first interview provided information on the social background, the achievements, the future life plans of the students and the school that they attended. Dronkers & Hemsing (1999) analyzed the educational and occupational careers of these 1,989 students.

Their first hypothesis could be accepted that pupils of Protestant and Catholic secondary schools in Nordrhein-Westfalen have higher educational outcomes than public schools, after controlling for other characteristics. This confirmation cannot be explained by a higher selection of intelligent pupils in Protestant or Catholic schools or by their parents’ social class. Pupils in Catholic schools obtain higher grades at the end of their grammar school, while pupils at Protestant schools attain higher educational level inside or outside their grammar school and are more successful in their further studies. Interestingly, pupils of non-religious private schools do not have higher outcomes than pupils of public schools after controlling for characteristics of parents and pupils. This difference can be explained by the distinction between value-communities (religious schools) and functional communities (private schools).

The second hypothesis of Dronkers & Hemsing (1999) is that pupils of Protestant and Catholic schools in Nordrhein-Westfalen have equal success in university and equal occupational levels as pupils at public schools, after controlling for the unequal educational outcomes and other characteristics. This is validated with the occupational level of pupils of Catholic schools as an exception. The occupational level of their first job is lower. A possible explanation of this result is that the Catholic grammar schools are seminars for the training of priests, who will attach less value to a high status of their first job.

Their third hypothesis, that pupils at Protestant and Catholic schools in Nordrhein-Westfalen are equally religiously socialized as pupils at public schools, has to be rejected for Catholic schools but can be accepted for Protestant schools. Adult pupils of Catholic schools attend church services more often than pupils from Protestant, private or public schools. An explanation of this Catholic exception is that some of the Catholic grammar schools were still seminars for the training of priests, who will attend church services more often if they become priests.
4.2. Mathematics and natural sciences scores

Dronkers, Baumert & Schwippert (1999) analyzed the Third International Mathematics and Science Study (TIMSS) of the International Association for the Evaluation of Educational Achievement (IEA). The main survey was carried out in 1995/96 cross-sectionally with three age groups. Their analysis makes use of the database of population II, which comprises students of two adjacent grades with the largest proportion of 13- and 14-year-olds. In Germany, grade 7 and grade 8 have been selected as target population. A representative probability sample of classes stratified according to state and school type was taken, covering 150 schools with one 7th and 8th grade each. The sample comprises a total of about 7,000 students of each target group. As an enhancement of the international design, TIMSS-Germany is designed longitudinally with two measurement points at the end of the 7th and the 8th grades. The achievement tests are IRT-scaled, a multi-matrix sampling design was implemented using anchor items for the linkage of the rotated test forms and the two measurement points. As distinct from the main international study, TIMSS-Germany also includes information on SES consistent with the international ISCO-standard and measures on basic dimensions of mental ability (for further information on the German TIMSS data and measurement of mental ability: Baumert, Lehmann, Lehrke et al., 1997; information on the IEA achievement tests for mathematics, biology and physics: Garden & Orpwood, 1996).

These German TIMSS data contained five religious schools with enough valid data for the core variables in the TIMSS, scattered throughout 3 German states: Bayern, Nordrhein-Westfalen and Rheinland-Pfalz. There are 9 public Realschule and 13 public Gymnasiums (Grammar school) in the same states and with enough valid data for the core variables (N-pupils =371). The pupils, whose learning results were analyzed by Dronkers, Baumert & Schwippert (1999), are still at the beginning of their secondary school careers. This means that they tend to underestimate the possible effects of attending public and religious schools.

Dronkers, Baumert & Schwippert (1999) rejected their hypothesis that pupils at religious secondary schools in Germany have higher learning results in mathematics and natural sciences than pupils from public schools. This is clearly not the case, either if one controls for parental characteristics or for intelligence or earlier performances in mathematics and natural sciences. But pupils in German public and religious schools differ clearly in their average intelligence levels. The higher level of religious school pupils cannot easily be explained by these schools selecting their pupils on the basis of their intelligence, because the parental backgrounds of pupils at public and religious schools do not differ significantly. The most likely explanation seems to be that religious schools offer a learning environment that stimulates the intelligence. This result corresponds with the thesis of a higher effectiveness of religious schools, also in Germany. But these higher intelligence scores at religious schools do not lead to higher learning achievements in mathematics and natural sciences.

Dronkers, Baumert & Schwippert (1999) offered a possible explanation for the contradiction between the rejection of their hypothesis and the higher effectiveness of religious schools in stimulating intelligence. This explanation might be the difference between the official and the hidden curricula. Public and religious schools within each German State have the same curriculum and the same final examination and thus public and religious schools cannot deviate too strongly in the levels of teaching they provide their students. Within these restrictions of the same curriculum and final examination the authorities in religious schools might focus their efforts less on the highest results in mathematics and natural sciences, but instead concentrate more on learning foreign languages, general knowledge and non-cognitive aspects of education (motivation, social competence, etc.). This preference might result from the religious traditions in these religious schools (mostly Catholic). But this preference might also reflect the wishes of parents, who may believe that foreign languages, general knowledge and non-cognitive aspects of education are more important for upward social mobility or maintaining a high social
position than the best grades in mathematics and natural sciences. As long as religious schools are more successful in homogenising the learning results in mathematics and natural sciences, parents may believe that less focus on these subjects is not harmful for their children’s life careers. If this focus in the hidden curriculum of religious schools on foreign languages, general knowledge and non-cognitive aspects of education exists, it might explain the contradiction between the equal effectiveness of public and religious schools in mathematics and natural sciences and the higher effectiveness of religious schools in stimulating intelligence.

4.3 cognitive and non-cognitive outcomes in old and new Länder.

Dronkers, Baumert and Schwippert (2001) analyze a database provided by the longitudinal study “Learning Processes, Educational Careers, and Psychosocial Development in Adolescence” (BIJU) which has been carried out by the Max Planck Institute for Human Development in collaboration with the Institute for Science Education at the University of Kiel (IPN). One major component of this study is the analysis of domain-specific learning processes as dependent on social and cognitive resources, prior knowledge, motivational orientation, learning strategies, and quantity and quality of instruction. The longitudinal study began with the investigation of the main cohort during the school year 1991/92. The data collection started with pupils in the 7th class at three measurement points. The sample of school classes, disproportionally stratified according to state and type of school, comprises some 8,000 students from 212 schools of all secondary types in three states of West and East Germany (Mecklenburg-Vorpommern, Nordrhein-Westfalen, Sachsen-Anhalt). In order to separate the effects of school and grade, two classes per school were included in the sample (for further information Schnabel 1998; Köller 1998).

Dronkers, Baumert & Schwippert (2001) use two waves of these BIJU data: the pupils tested in the 7th class (the beginning of secondary school in Germany) and retested in the 10th class. They analysed only the scores of those cognitive and non-cognitive goals, which were tested both in the 7th and 10th class. There were 5 religious schools (4 Gymnasien, 1 Gesamtschule) in the first wave and 4 religious schools in the second wave (only Gymnasien) with enough valid data for the core variables in the BIJU, scattered throughout the German states Mecklenburg-Vorpommern, Nordrhein-Westfalen and Sachsen-Anhalt. They included all public schools of the same type and in the same state and with enough valid data for the core variables.

The pupils, whose cognitive and non-cognitive scores were analysed, have not finished their secondary school careers but are only halfway through (10th class). This means that Dronkers, Baumert & Schwippert (2001) might underestimate the possible effects of attending public and religious schools.

Dronkers, Baumert & Schwippert (2001) can accept their hypothesis that pupils of religious schools in Germany have higher cognitive and non-cognitive scores on some tests than pupils from public schools, after controlling for other characteristics of schools and parents. For the cognitive tests this is only true for English in the 7th class and for biology in the 10th class. But pupils attending religious schools do worse on mathematics in the 10th class. For the non-cognitive tests self-concept of academic ability and conformist motive to help others in the 7th class pupils in religious schools also differ from pupils of public schools. On the other cognitive and non-cognitive tests pupils of public and religious schools score equally.

A difference between the official and the hidden curriculum can be an explanation of this difference in effectiveness of public and religious schools in natural sciences and mathematics on the one hand and foreign language on the other hand. Within each German State, public and religious schools have the same curriculum and thus public and religious schools do not deviate in what they offer their students. But on average the authorities in religious schools might focus less on the highest results in mathematics and natural sciences and concentrate more on learning
foreign languages, general knowledge and non-cognitive aspects of education (motivation, social competence, etc.). This is precisely what we found in this analysis: pupils of religious schools do better in English tests, are more modest about their own academic ability (self-concept of academic mobility) and claim less to help people for conformist reasons. This preference for foreign languages, general knowledge and non-cognitive aspects of education might be a result of the religious traditions in these religious schools (majority being Catholic). But this preference might also reflect the wishes of parents who may believe that foreign languages, general knowledge and non-cognitive aspects of education are more important for upward social mobility or maintaining a high social position than the highest scores in mathematics and natural sciences. As long as religious schools are more successful in homogenizing the learning results in mathematics and natural sciences, parents might believe that less focus on these subjects is not harmful for the life course of their children.

5. Hungary

Religious grammar schools (gymnasiums) existed already in the 19th century under the Austro-Hungarian Monarchy and continued until 1948. Religious education was abolished in Hungary after 1948. However, some possibilities remain in existence because an agreement was made between the communist government and the churches. The Catholic Church (the largest: 70% of the population has Catholic denomination in Hungary) was in a relatively better position during these negotiations. They were allowed to keep eight secondary schools. Protestants and Jews could only keep one school. The agreement contained a numerus clausus limiting the numbers of pupils the schools could admit each year. In 1985, a new law already declared the "free choice of education", the numerus clausus was formally abolished but the total of 10 religious secondary schools remained unchanged as yet.

In 1989, a new law declared the "freedom of religious activities". In 1990, a new law was passed regulating the relationship between the state and church(es). This declared that the churches could provide educational, cultural, social, etc. "services" and - among other things - could re-establish religious schools. In line with the law on political compensation, churches started to reclaim their old schools, the original buildings, which in many cases were used as nationalized public schools for 5 decades. This process is slow, it has not yet been completed, and some churches will only get their schools back in 2001. This date, specified by the law, is a deadline for the whole procedure. In 1998/1999 school year, 7% of the secondary schools were religious institutions. Figure 1 gives an impression of the growth of the percentage of pupils at religious grammar schools. By denomination, the majority of the religious schools is Catholic, about one-quarter is Calvinist and the proportion of Lutheran schools is even lower. Only one or two institutions exist under other denominations. By region, the majority of the religious schools can be found in towns. A smaller proportion of them exists in Budapest or in the villages. As far as the demographic composition of religious grammar schools is concerned, they tend to deviate from public grammar schools. Girls are usually over-represented in religious grammar schools, while gender distribution of the pupils is more equal in state grammar schools.

The law states that religious schools have to provide the same functions to students as public schools. This means, they have to teach the national curriculum (which is more flexible in general nowadays than it used to be), supplemented by their own religious courses. This is the requirement for obtaining financial support from the state. The local municipalities provide the annual state grants. This is based on a per capita principle, financial support depends on the number of students. Local municipalities decide if the religious school in the locality meets the requirements and provides a regular type of education as well. As these local municipalities usually have a limited budget, this created problems. Since 1998, the
religious schools have to make a formal declaration about their activities being in line with the state and local requirements and this entitles them to receive financial support by law. The system has improved in recent years.

The state also provided some special support directly to the religious schools for their reorganization. Moreover, the churches lend financial support to their schools from different sources: the churches receive money from the state budget, they can obtain money from abroad, or from taxpayers in Hungary. When taxpayers make their tax declaration, they have the right to channel 1% of their taxes to a concrete purpose, to a charitable institution, to a (religious) school, etc. In addition, members of churches also pay tax to their church.

The admission procedure and examination is the same for Catholic or Calvinist or public grammar school students. The procedure can differ between colleges and universities but does not differ from the viewpoint of secondary schools. There are no additional interviews for students from different grammar schools or special relations between specific universities and specific grammar schools.

Dronkers & Robert (2000) tested whether the pupils of religious grammar schools in Hungary have higher grades and a better opportunity to enter vocational colleges or universities than comparable pupils of public grammar schools. Data are from a self-administered survey among 4th grade secondary school students. The results of Dronkers & Robert (2000) show clearly that pupils at religious grammar schools in Hungary attain higher grades and that they have more success in entering tertiary education and university. This is especially true for pupils at Catholic grammar schools, but there are clear indications that the Calvinist and Lutheran grammar schools may catch up with Catholic grammar schools in the near future, if they are given the time to develop themselves.

These superior results of pupils in religious grammar schools cannot be explained by a more selective social composition of these schools. On the contrary, controlling for pupils' and parental characteristics tends to increase the differences in results between pupils from public and religious grammar schools. If social composition were the main explanation of these better results of pupils of religious grammar schools, controlling for these pupils' and parental characteristics would decrease the differences in results between pupils from public and religious grammar schools. We cannot even explain the differences in results between pupils from public and religious grammar schools by assuming that pupils in religious schools are academically more ambitious. This difference in academic ambition might still explain the higher grades, because we do not have an indicator of academic ambition. But these results of Dronkers & Robert (2000) for success entering tertiary education cannot be explained by a possible difference in academic ambition between pupils from public and religious grammar schools, because we control for their grades as an indicator of their academic ambition.

The results of their analyses provide evidence that the pupils of religious grammar schools in Hungary have higher grades and a better opportunity to enter vocational college or university than comparable pupils of public grammar schools. We concluded from these results that religious schools in a post-communist society like Hungary are, on average, more effective than public schools.

6. The Netherlands

Because the Dutch research on the effectiveness differences between public and religious schools will be discussed elsewhere (Dijkstra, Dronkers & Karsten, 2001), I shall present only a concise summary of it here. Research on the cognitive effectiveness of public, Catholic and Protestant schools in the Netherlands (Dronkers, 1996; Dijkstra, Dronkers & Hofman, 1997; Sturm, Groenendijk, Kruithof & Rens, 1998) shows, on average, a higher effectiveness of Catholic and
Protestant schools\textsuperscript{20}, although there are three interesting deviations. The first deviation from the average higher effectiveness of Dutch religious schools is that public schools in regions with a majority of Catholic or Protestant schools have higher effectiveness than public schools in regions with a majority of public schools. Secondly, schools, which are both non-religious and private, have on average a lower effectiveness than public schools, after controlling for social composition of their pupils (Koopman & Dronkers, 1994). The third deviation from the average higher effectiveness of Dutch religious schools is that orthodox-Protestant schools do not have higher effectiveness than public schools or less strict Protestant schools. A better educational administration, a stronger value-oriented community between parents and schools and a more deliberate choice of religious schools might be the most important mechanisms, which produce the average higher effectiveness of religious schools in the Netherlands.

7. Scotland

Scotland has a history of institutions, distinct from those of England and other parts of the United Kingdom\textsuperscript{21}. One of those distinct institutions is education with a tradition of separate legislation. The Secretary of State for Scotland is responsible for this Scottish education. The Scottish educational system is a high status system, built on long established key values. The fundamental idea is the provision of free, compulsory education for all within a specified age group. The broadly-based curriculum should be tailored to age, aptitude and ability and also fitting individual need. Parents are legally responsible for ensuring their children of school age receive efficient education (Education Act, part II, section 30). Therefore, parents can provide education by other means: children can be enrolled in an independent school or parents can educate their child(ren) at home. Education, not schooling, is compulsory when a child is of school age (currently 5-16 years of age).

Religion was a complicating factor in the Scottish educational system. The pre-industrial system derived from the Protestant Reformation and was run by the established Church of Scotland. From mid-nineteenth century onwards, there is a substantial Catholic-Irish immigration into the rapidly industrializing Clydeside conurbation in the west of Scotland. Poverty and discrimination combined to block the social mobility of many Irish migrants\textsuperscript{22}. As long as Catholic schools were controlled by the Catholic Church, provision was severely constrained by finance. But in 1918 or shortly thereafter, virtually all Catholic schools\textsuperscript{23} were taken over by the state, including the eleven that by then had attained, or were shortly to reach, full secondary status. Catholic schools have subsequently retained their religious identity within the state sector. In the late 1970s 19\% of Scottish pupils attended them. The social disadvantage of Scottish Catholics continues, however, though probably not to the same degree as in Northern Ireland. The state school system of secondary education at the end of the 1970s incorporated three distinct phases of historical development of the Scottish educational system. There is the first generation of 66 schools that had constituted the national secondary school system in the nineteenth century. None of these schools was Catholic. Second, there are 126 of second-generation schools founded or designated between 1902 and 1918. Ten of these are Catholic. Then there is a third generation of a further 278 state schools. Seventy-one of these schools are Catholic.

McPherson & Willms (1986) are the only ones who analyzed the differences in effectiveness between these Catholic and public Scottish schools with the appropriate multi-level techniques. They used the well-known 1981 Scottish School Leavers Survey. McPherson & Willms (1986: 279-281) found that, after controlling for the socio-economic composition of schools, pupils of Catholic schools in Scotland performed better in overall SCE attainment, in English and in arithmetic. These advantages were worth all of one or two examination passes, and add
considerably to the young person's chances of finding a job after leaving school, or of gaining
admission to favored post-school courses. The authors note that their findings controvert
pessimistic but casual public judgements of the performance of Catholic schools. Such
judgements are sometimes based on Catholic schools' unadjusted examination results, which are
inaccurate because of the over-representation of Catholic pupils in the lower SES groups as
compared to the non-Catholic schools.

8. Conclusion
This review of the differences in effectiveness between public and religious state-funded school
in six different European societies highlights clear differences. Effectiveness differences in
school success and cognitive qualification clearly exist between public and religious schools in
France, Hungary, the Netherlands and Scotland and these differences cannot be explained by the
different social composition of these schools or by other obvious social characteristics of pupils,
parents, schools or neighborhoods. These differences in effectiveness are less clear in Germany,
although there are some indications of a higher effectiveness of German religious schools,
especially if analyzed within the context of one Land. However, effectiveness differences in non-
cognitive achievements, which are often the main argument for the existence of state-funded
religious schools, are not found in Flemish-Belgium and only partly in Germany.

This review allows only very preliminary conclusions about the higher effectiveness of
religious schools in European societies, but the direction of the results is clear. Religious schools
are generally speaking more effective in the cognitive domains than public schools, while they
no longer differ in the effectiveness of their religious socialization. This makes religious schools
attractive for non-religious parents, who wish to maximize the educational outcomes of their
children. The increase of the percentages of pupils attending religious schools since the '70s may
illustrate this attractiveness. The importance of the effectiveness differences in the cognitive
domains indicates that educational systems with public and state-funded religious schools give
parents a real choice between schools of different quality. Given the higher general level of
achievements in both public and religious schools of European societies and the smaller
differences between these achievement of these schools within European societies compared to
the average achievement of public schools and the between-school differences in the USA, it is
difficult to argue that the parental choice in these European societies has increased inequality
within these societies or lowered the level of schooling. Thus, European educational systems
with public and religious-subsidized school sectors are indeed a better place to test the basic
assumption of the parental choice debate that religious schools are more effective.

Literature
Baumert, J., Lehmann, R., Lehrke, M., Schmitz, B., Clausen, M., Hosenfeld, I., Köller, O.
onderzoek naar de vrije schoolkeuze als legitimatieschema en als sociaal proces. Leuven:
Universitaire Pers Leuven.
DC: The Brookings Institution.


Graph 2: Distribution of primary and lower secondary level pupils (ISCED 1-2) according to the type of institutions they attend, from 1993/94 to 1997/98

Explanation note
Pupils are classified into different categories according to whether they attend public sector education institutions, controlled and organised directly by the public authorities, or private education institutions, controlled and organised by a non-governmental organisation.

Among private education institutions, those which are grant-aided and those which are not. For UOE data collection, a private education institution is said to be grant-aided if it receives more than 50% of its grants from the public authorities. A private education institution receives less than 50% of its grants from the public authorities.

In most cases, the data permits the narrowest classification to be used. It is not possible to make a distinction between pupils attending grant-aided or non-grant-aided private education institutions in Germany or Portugal.

The ISCED classification was used to collect the data. Up to (and including) 1996/97, the ISCED 76 was used. Since 1997/98, the ISCED 97 has been used. This change explains certain differences which may be observed between 1996/97 and 1997/98.

Additional notes
Belgium and Luxembourg: Non-grant-aided private education is not included.
Ireland: The switch from ISCED 76 to ISCED 97 has had the effect of artificially increasing the figures for 1997/98. The reality is that the downward trend for the total, ISCED 1 and 2, is continuing.
United Kingdom: The graph shows the situation for the United Kingdom as a whole, but in Scotland only 4% of pupils attend non-grant-aided private schools and the remainder attend public schools.
Figure 1: Proportion of Hungarian students in religious gymnasiums as compared to all Hungarian students in all gymnasiums (%) between 1985 and 1999

Table 1: Summary of the standardized parameters and standard errors from different multilevel analyses of the effect of public schools (Community or Official) compared with Catholic schools (Free schools; reference category) on ethnocentrism, hard repression and sexual & bio-ethical liberalism.

<table>
<thead>
<tr>
<th>Models</th>
<th>Ethnocentrism</th>
<th>Hard repression</th>
<th>Sexual &amp; bio-ethical liberalism</th>
</tr>
</thead>
<tbody>
<tr>
<td>No controls</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community school</td>
<td>0.64 (2.47)</td>
<td>4.48 (2.19)*</td>
<td>0.91 (1.84)</td>
</tr>
<tr>
<td>Official school</td>
<td>12.09 (3.25)**</td>
<td>11.8 (2.89)**</td>
<td>4.68 (2.28)*</td>
</tr>
<tr>
<td>Controls for social backgrounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community school</td>
<td>-0.78 (1.71)</td>
<td>2.88 (1.42)*</td>
<td>0.37 (1.92)</td>
</tr>
<tr>
<td>Official school</td>
<td>6.59 (2.21)**</td>
<td>6.59 (1.84)**</td>
<td>3.13 (1.92)</td>
</tr>
<tr>
<td>Controls for social backgrounds and level of secondary school</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community school</td>
<td>-2.05 (1.55)</td>
<td>1.62 (1.08)</td>
<td>1.37 (1.22)</td>
</tr>
<tr>
<td>Official school</td>
<td>2.75 (2.10)</td>
<td>2.70 (1.44)</td>
<td>-2.33 (1.55)</td>
</tr>
</tbody>
</table>

*p<0.05; **= p<0.01; ***=p<0.001.

Controls for social backgrounds: gender, nationality, nationality of father, preference for cultural populist media, preference for entertainment TV & music, preference for highbrow TV & music, preference for heavy music, Catholic religion, free thinking, other religion, non-believer, alternative beliefs, member of social association, member of religious organisation, parental occupational prestige, mother’s professional activity, relationship with parents.

Controls for level of secondary school: technical studies, vocational studies (general school-type as reference category).

<table>
<thead>
<tr>
<th>Year</th>
<th>% pupils primary and secondary private education</th>
<th>% pupils primary private education</th>
<th>% pupils secondary private education</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960-1961</td>
<td>18.1</td>
<td>15.9</td>
<td>22.6</td>
</tr>
<tr>
<td>1970-1971</td>
<td>16.5</td>
<td>14.1</td>
<td>20.1</td>
</tr>
<tr>
<td>1975-1976</td>
<td>16.2</td>
<td>13.7</td>
<td>19.5</td>
</tr>
<tr>
<td>1980-1981</td>
<td>16.6</td>
<td>13.9</td>
<td>20.1</td>
</tr>
<tr>
<td>1985-1986</td>
<td>17.3</td>
<td>14.2</td>
<td>21.0</td>
</tr>
<tr>
<td>1990-1991</td>
<td>17.0</td>
<td>13.8</td>
<td>20.7</td>
</tr>
</tbody>
</table>

Table 3: The percentages of private schools of the total number of schools in 3 German states and for the different school types in secondary education for the school year 1992/1993

<table>
<thead>
<tr>
<th>State</th>
<th>Hauptschule</th>
<th>Realschule</th>
<th>Gesamtschule</th>
<th>Gymnasium</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>2.54</td>
<td>6.82</td>
<td>1.66</td>
<td>11.07</td>
</tr>
<tr>
<td>Meckelenburg-Vorpommern</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>1.06</td>
</tr>
<tr>
<td>Nordrhein-Westfalen</td>
<td>0.57</td>
<td>7.74</td>
<td>3.85</td>
<td>17.01</td>
</tr>
<tr>
<td>Sachsen-Anhalt</td>
<td>0.00</td>
<td>0.00</td>
<td>0.00</td>
<td>3.47</td>
</tr>
</tbody>
</table>

Table 4: The percentage of pupils in Realschule and Gymnasium attending private schools between 1956 and 1998

<table>
<thead>
<tr>
<th>Year</th>
<th>Realschule</th>
<th>Gymnasium</th>
</tr>
</thead>
<tbody>
<tr>
<td>1956</td>
<td>8.9</td>
<td>13.0</td>
</tr>
<tr>
<td>1965</td>
<td>8.5</td>
<td>13.2</td>
</tr>
<tr>
<td>1975</td>
<td>5.5</td>
<td>9.6</td>
</tr>
<tr>
<td>1990 (old BRD states)</td>
<td>8.4</td>
<td>12.2</td>
</tr>
<tr>
<td>1998 (old BRD states, including East Berlin)</td>
<td>8.2</td>
<td>12.1</td>
</tr>
<tr>
<td>1998 (new BRD states, excluding East Berlin)</td>
<td>0.03</td>
<td>2.5</td>
</tr>
<tr>
<td>1998 (total)</td>
<td>7.1</td>
<td>10.2</td>
</tr>
</tbody>
</table>

Notes

1 Germany hardly has a national educational system, but the educational system differs from state (Länder) to state, although the federal basic law sets guidelines for the educational systems of the different Länder and there is some co-ordination of educational policy at the federal level.

2 With perhaps the exception of Poland, these former communist societies have not become very religious since the fall of communism.

3 Although the percentage of pupils in Italy attending private schools is close to the world average, these private schools received no funding from the state until recently. Because the effectiveness of Italian religious schools has not yet been studied (Ribolzi, 1987), I omit Italy as a case.

4 Also for England we use the term public school in the usual international meaning of the word (schools organised and paid for by the (local) public authorities) instead of the misleading English meaning (selective private schools organised by educational entrepreneurs).

5 There is also some research on this topic in Spain, but these studies are not accessible at this moment.

6 I refer to Glenn (1989) and Elchardus & Kavadias (2000) for the description of the Belgian system.

7 A negligible minority of these ‘free’ schools is Protestant, Jewish or based on a specific educational method.

8 I am not aware of comparable studies in French- or German-speaking Belgium and doubt their existence.

9 One explanation for the omission of research on cognitive achievements of pupils of public and Catholic schools might be the absence of a national final examination at the end of secondary school in Belgium, contrary to France, the Netherlands and some German Länder.

10 Turks and Moroccans are the largest groups of non-European migrant workers, who have come to Europe since the ‘60s.

11 The law named after the minister Debré, who introduced the law.

12 During this period of the Fifth Republic the right had the majority in parliament and government and occupied the presidency.

13 State means here not the federal state but the different states or Länder of the German Federal Republic.

14 Die Lehrziele, Einrichtungen und Lehrkräfte der private Schulen sollen nicht hinter den öffentlichen Schulen zurückstehen und eine Sonderung der Schüler nach Besitzverhältnissen nicht gefördert wird.

15 Private Volksschulen sind allerdings nur bei besonderem pädagogischen Interesse zuzulassen oder wenn sie als Gemeinschaftsschule, Bekenntnis- oder Weltanschaungsschule errichtet werden sollen.

16 In der Privatschule wird ein eigenverantwortlich geprägter und gestalteter Unterricht erteilt, insbesondere soweit er die Erziehungsziele, die weltanschauliche Basis, die Lehrmethode und Lehrinhalte betrifft.

17 The term private school is used here in accordance to article 7 of the Constitution and the decision of the German ministers of education of the Länder on 10 and 11 September 1951.

18 This is a major difference with the USA where the freedom of schools to teach subjects at different levels is greater than in most other European societies like Germany.
There is one indication in the TIMSS data that pupils in German private schools deviate from pupils in public schools, because the former score significantly lower on a scale of self-concept of academic ability. Social composition or higher selectivity of the pupils cannot explain the effects.

In this section on the Scottish educational system I use Teelken (1998) and McPherson & Willms (1986).

Social and political conflict between Catholic Irishmen and Protestant Scotsmen is not unique for Scotland. The current troubles in Northern Ireland can partly be seen as a conflict between Protestant immigrants from Scotland and local Catholic Irishmen.

Also the Protestant schools run by the Church of Scotland were taken over by the state in 1918. The Church of Scotland still has the right to be represented on the education committee of every regional authority.

These preliminary conclusions of this review also underline the necessity of a European wide study of effectiveness differences between public and religious schools as a follow-up to Eurydice (2000).
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