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**СОЦИАЛНО НЕРАВЕНСТВО В АМЕРИКАНСКОТО И ГЕРМАНСКОТО ВИСШЕ  
ОБРАЗОВАНИЕ**

**SOCIAL INEQUALITY IN AMERICAN AND GERMAN TERTIARY EDUCATION**

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**Abstract:** Against the backdrop of developments in student tuition fees in the USA and the partial charging of fees in some of Germany's federal states, we shall determine whether and in what measure social inequality exists at US and German universities. Within this framework, we shall examine the extent to which the commodity "university education" is unequally distributed amongst the population (distributive imbalance) and which specific social groups are affected by inequalities of opportunity. In addition, the typical educational behaviour of different social strata will be identified and examined in the context of personal contributions to tuition financing in the USA and Germany.

**Key words:** social inequality, university education, tuition financing, educational funnel.

**1. University Education in the USA  
and in Germany According to Social  
Stratum**

In 2009, Germany had its highest ever level of new students with 422,700 new enrolments. Since 2005, when the German federal states became entitled to charge tuition fees, there has been a relative increase of 11% of new students in states where fees are implemented, and 12% in those where they are not. Although new student numbers declined simultaneously with the introduction of fees in the states that had chosen to implement them, this was only a brief occurrence, so that on the whole, there is no negative interdependency between the charging of tuition fees and the number of new students in Germany.<sup>1</sup>

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<sup>1</sup> In this context, the *Stifterverband* talks of a "one-off effect", in the course of which the numbers of new students dropped in most of the federal states charging tuition fees, but two years after fee introduction, had risen again to exceed their previous level. Cf. *Stifterverband für die Deutsche Wissenschaft: Auswirkungen von Studiengebühren, Ein Vergleich der*

Of the 45% of the population who achieved the qualification to study at a university in 2008, about three quarters of them actually enrolled at universities.<sup>2</sup> About 25% of them embarked on a non-academic occupational training program.<sup>3</sup> It is at this point – on the threshold of a university education – that closer observation shows marked social disparities in the educational stakes, which impact significantly on the socio-cultural environment at German universities.

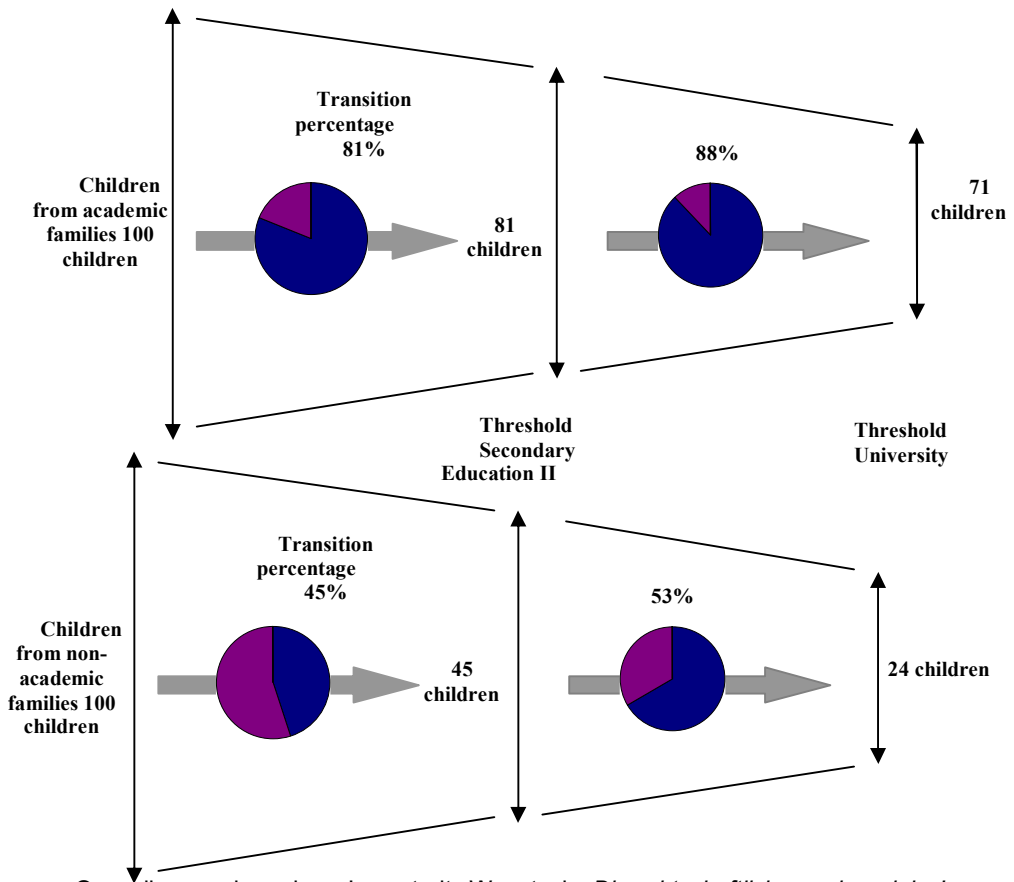
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*Bundesländer nach Studierendenzahlen und ihrer sozialen Zusammensetzung, Ländercheck, Lehre und Forschung im föderalen Wettbewerb*, September 2010, p. 5f.

<sup>2</sup> This percentage has been quite stable since the 1990s and reflects the increased number of individuals qualifying for university entrance rather than an increase in the desire to go to university.

<sup>3</sup> Cf. Heine, C., Quast, H., Beuße, M., *Studienberechtigte 2008 ein halbes Jahr nach Schulabschluss*, 2010, p. 21 and p. 73.

**Figure 1:** Educational Funnel 2007 – Social Selection – Educational Participation of Children According to whether the Father Holds a University Degree



Source: Own diagram based on Isserstedt, W., et al., *Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2009*, p. 11.

Different opportunities at university level between the social groups are dependent on the occupational status of parents, and whether the parents hold a university degree themselves.<sup>4</sup>

The educational funnel in Figure 1 shows that if parents in Germany hold university degrees, this is a decisive selection criterion on the threshold of a university education. Whilst in 2007, out of 100 academic families, 71 children started

university, out of 100 educationally weak families, only 24 children did so.<sup>5</sup>

Besides students from weak educational backgrounds and low-income family backgrounds, students with a migration background also show a tendency to decide against a university education. Of all university students, 11% stem from migratory backgrounds<sup>6</sup>, which means such students are under represented and that the social strata found amongst university students fail to reflect the relevant percentages of the corresponding age group amongst the

<sup>4</sup> Cf. Isserstedt, W., et al., *Die wirtschaftliche und soziale Lage der Studierenden in der Bundesrepublik Deutschland 2009*, p. 9f.

<sup>5</sup> Cf. *ibid.*, p. 11.

<sup>6</sup> Cf. Isserstedt, W., et al., *op. cit.*, p. 7f.

population at large. Thus, although the attendance of a German university will enable many individuals the chance of furthering their education, to an even greater extent, it will guarantee that the status of academics remains unchanged in future generations.<sup>7</sup>

Although the German educational system has in recent times been criticized for reproducing social inequality, the USA has traditionally been known as a country which enables “unlimited educational opportunities for all members of society”. In fact, this belief in social upward mobility through “education and hard work in the country of unlimited possibilities” remains undiminished.<sup>8</sup> However, this belief cannot be empirically upheld with regard to an American university education. According to the U.S. Bureau of Labor Statistics, in October 2009, approx. 70% of all high school graduates of the year 2009 were enrolled at a university – the historic apex of a continuous rise in the number of first year students in the USA since 1959.<sup>9</sup> Table 1 shows the enrolment rates of American high school graduates in 1988, 1998, and 2008, corresponding to family incomes. We can see that despite the significant parallel increase in study fees over the last few years, an increasing number of young people from a low-income family background are going to university. 80% of high school graduates from the highest income quintile move on to a university education – and thus have a 25 higher enrolment rate than those from the lowest income quintile.<sup>10</sup>

Further differences in university attendance figures are linked to the dependence on the ethnic background of the high school graduates. Whilst in the 1970s, high school graduates of, for example, Latin American

origin, went to university as frequently as white Americans, by 2008, this figure had dropped from 49.0% to 36.7%.<sup>11</sup>

Similarly to Germany – if not quite as pronounced – the parental educational background was either a favourable influence or a challenging influence on a graduate's decision to move on to university. For several years now, American students have been coming increasingly from academic families. In this respect, the percentage of students whose parents' highest level of education was high school graduation has fallen continuously from the academic year 1999/2000 to 33.5% in 2007/8. Simultaneously, the percentage of students with one parent who has attended university but not graduated, rose from 22.9 to 27%. Comparatively stable, however, is the percentage of students – 40% – whose parents hold a Bachelor's degree or higher.<sup>12</sup>

To sum up: access to American universities reveals fundamental social disparities despite a marked “educational optimism”. Analogously to the situation in Germany, lower chances of attending a university result from the social structural characteristics of “low income family background”, “weak educational family background” and “migratory family background”. Whilst in Germany educational and occupational status of the parents are key to a student's decision about whether to study or not, in the USA it is primarily the family income which has a socially selective impact on the threshold of university entrance. This different weighting seems to a large extent to be due to the different fee systems in Germany and America. A combination of the before-mentioned selection criteria in the case of a student with a migration background, from a low-income and

<sup>7</sup> Cf. Isserstedt, W., et al., op. cit., p. 10.

<sup>8</sup> Approx. 70% of the American population believe in the saying, “from shoe shine boy to millionaire”. Cf. Hertz, T., *Understanding Mobility in America*, 2006.

<sup>9</sup> Cf. U.S. Bureau of Labor Statistics, *college Enrollment and Work Activity of 2009 High School Graduates*, 2010, p. 1.

<sup>10</sup> Cf. Collegeboard, *Education Pays 2010*, p. 35.

<sup>11</sup> Cf. *ibid.*, p. 36; NCES, *Digest of Education Statistics 2009*, p. 296. Here, and in the following, the differentiations between students of White, African-American, Latin American heritage are part of the established sociodemographic classifications used in America for statistical purposes.

<sup>12</sup> Cf. NCES, *Profile of Undergraduate Students*, 2010, p. 4.

educationally weak family substantially lowers the chance of going to university in both countries.

**Table 1:** Transition to University by High School Graduates According to Family Income 1988, 1998, 2008 in %

Income Quintile	1988	1998	2008
Lowest Quintile	38%	51%	55%
Second Quintile	36%	51%	57%
Third Quintile	48%	63%	61%
Fourth Quintile	61%	70%	69%
Highest Quintile	73%	79%	80%

Source: Own diagram based on Collegeboard Education Pays 2010, op. cit., p. 35.

## 2. Choice of University and Choice of Study Programme According to Social Stratum

For both the USA and Germany, in addition to the before-mentioned social selectivity with regard to university entrance in general, there are persistent differences in the choice of university and in the choice of study programme, which are directly linked to the social stratum to which a student belongs. If we compare the various types of university in USA and Germany with regard to their socio-demographic make-up and to their student recruiting patterns, it becomes obvious that both German and American universities are institutions of social closure. Thus, in Germany, those children with an academic family background who wish to go to university are much more likely to attend an *Universität* (traditional university) than a *Fachhochschule* (university of applied science with a more practical orientation). The percentage of children with an academic family background who were attending a traditional university was 59%, whilst 45% of them were attending a university of applied science. In contrast, children from families with no academic tradition who have gained their university entrance qualification (*Abitur*) are much more likely to

attend a university of applied science than a traditional university.<sup>13</sup>

Discrepancies between the two types of university can also be found in dependency on students' social backgrounds. Although in the last two decades the social composition of the students at universities of applied science has continued to even out, simultaneously at traditional universities the social divide is widening.<sup>14</sup>

Social inequality with regard to the choice of university in the USA is just as evident. The higher the level of education of their parents, the more likely beginner students are to embark on a four-year programme of study rather than a 2-year one and are more likely to visit private institutions than public ones. Whereas 32.8% of students on 2-year study programmes at public universities come from a non-academic family background, for 4-year programmes it is a percentage of 19.3%, and at 4-year programmes at private universities, the figure is only 14.7%.<sup>15</sup>

Finally, another social selection is implemented by the average tuition fees, which vary depending on the respective funding bodies of the universities. Because the

<sup>13</sup> Cf. Heine, C., et al., *Studienanfänger im Wintersemester 2007/08*, 2008, p. 12f.

<sup>14</sup> Cf. Isserstedt, W., et al., op. cit., p. 13.

<sup>15</sup> Cf. NCES, *Choosing a Postsecondary Institution*, 2009, p.4.

public 2-year community colleges charge the lowest fees, a lot of these are attended by students from low-income families. In order to save money, many students consciously begin their studies at a less expensive two-year Community College and – after having attained their Associate Degree – move on to a (rather expensive) four-year institution for another two years to complete their Bachelor's degree. High school graduates from high-income families, on the other hand, chose from the start a university which offers a 4-year programme. Children from very high-income families prefer to attend an expensive, prestigious and selective public or private institution.<sup>16</sup>

Furthermore, distinctive differences in the concentration of ethnic minorities can be found at the different types of American universities. Of high school graduates, those with a migration background are very likely to study at a Community College.<sup>17</sup> Of African-American students, 11% study at one of the approximately 100 Historically Black Colleges and Universities (HBCU).<sup>18</sup>

Social selectivity is not only evident with regard to university access in general and to the choice of university, but also with regard to the decision about what academic discipline should be chosen. A plethora of studies in Germany provide evidence that children in Germany with an academic family background who wish to go to university prefer to study academic disciplines such as medicine, pharmaceuticals or law, whereas children from low-income and educationally weak social strata more fre-

quently choose teacher training programmes or educational studies or electrical engineering.<sup>19</sup> Similar studies in the USA have shown that students with a non-academic family background and those with a migration background show a greater tendency to undertake a 2-year technically oriented occupational training programme and that when they do choose to study the more academic disciplines, they then prefer to study educational sciences rather than natural sciences such as mathematics or physics.<sup>20</sup> Thus, not only the decision on whether to go to university, but also the choice of university and the choice of academic disciplines is characterised by social disparities. Controlling for the established opportunity inequality factors of "educationally weak family", "low-income family" and "migration background", a systematic correlation between social background and choice of university and choice of academic discipline was found. Whilst the German universities of applied sciences and the American community colleges are proving to be key institutions of intergenerational educational mobility, Germany's traditional universities and the 4-year institutions in the USA – most particularly the high-ranking and selective ones – are promoting intergenerational (status) reproduction.<sup>21</sup> The high correlation between the educational achievement of parents and family income enable beginner students from the higher social strata to achieve better salary levels by choosing to attend prestigious universities and study prestigious disciplines. In return, via enrolment at less renowned and less influential institutions, beginner students from the lower social strata are steered into profes-

<sup>16</sup> Cf. Institute for Higher Education Policy, A Portrait of Low-Income Young Adults in Education, 2010, p. 3; Collegeboard, Education Pays 2010, p. 38; Haveman, R., Smeeding, T., The Role of Higher Education in Social Mobility, 2006, p. 6.

<sup>17</sup> Cf. Haveman, R., Smeeding, T., op. cit., p. 15.

<sup>18</sup> HCBUs are institutions of tertiary education which were established prior to 1964. Originally, they served the African-American population in the USA, although nowadays they are open to students from all ethnic backgrounds. HCBUs are partly in public hand and partly private. Cf. NCES, Digest of Education Statistics 2009, p. 355; NCES, The Condition of Education 2010, p. 116; Blackshire-Belay C., *Die Diversifizierung von Lehrkörper, Angestellten und Studierenden im Hochschulbereich*, 2001, p. 162.

<sup>19</sup> Cf. Becker, R., Haunberger, S., Schubert, F., *Studienfachwahl als Spezialfall der Ausbildungsentscheidung und Berufswahl*, 2009, p. 292f; Maaz, K., *Soziale Herkunft und Hochschulzugang, Effekte institutioneller Öffnung in Bildungssystem*, 2006, p. 50; Heine, C., et al., op. cit., p. 303.

<sup>20</sup> Cf. Blackshire-Belay, C., op. cit., p. 162f.

<sup>21</sup> Cf. Haveman, R., Smeeding, T., op. cit., p. 14ff.; Heine, C., et al., op. cit., p. 13.

sional and social positions that are less prestigious and influential. The choice of university and of academic discipline can therefore be seen as a particular case of social-stratum-specific difference in educational choice and occupational choice.<sup>22</sup>

### 3. Causes behind the Creation and Reproduction of Educational Inequality

Existing theoretic approaches for explaining the cause and effect relationship between education inequality and social background all belong to the so-called "rational choice theories". What these all have in common is that they regard educational inequality to be an "aggregate consequence of earlier individual educational decisions"<sup>23</sup>, which vary amongst the social classes.

At each institutionally stipulated transition point in the educational system, individuals or parents make an educational choice, which is conditioned by their background, under consideration of their school qualifications, which are social stratum-dependent. On the basis of the idea of human capital theory, Boudon<sup>24</sup> regards parental educational decisions to be the result of cost-benefit considerations of existing educational choices: parents choose the option for their children which the parents deem to be most profitable.

#### 3.1 The Impact of Primary Social Background Effects

Boudon links the creation and reproduction of unequal educational opportunities to primary and secondary effects of

social origin, whereby primary effects describe the impact of the intensity of the development and motivation of children during the socialization process on their academic performance and skills<sup>26</sup>. This intensity differs between the various social classes. More frequent learning opportunities, intensive development support and the imparting of language, motivation to learn, a stimulating environment and self-regulatory learning and action help children from the educationally strong social strata to achieve better at school. On the other hand, children from low-income and educationally weak social strata perform less well at school on account of cognitive disadvantages stemming from a less favorable, less motivating social environment.<sup>27</sup> This cultural socialisation effect can be concretized with the help of Bourdieu's<sup>28</sup> theoretical deliberations on social reproduction. As a central concept, he introduced the notion of "habitus", which can be understood as all the attitudinal dispositions, thought patterns, perceptions and strategic behaviour acquired and internalized within a family context.

This also includes learning strategies and educational motivation that are specific to social background, and language codes and cultures that are conveyed by parent to child during the process of family socialization and which are considered to influence academic success. Economic, cultural and social resources are unevenly distributed amongst the social strata and account for children growing up in different socialization contexts where they develop types of "habitus" that are social stratum-

<sup>22</sup> Cf. Becker, R., Haunberger, S., Schubert, F., op. cit., p. 307f.; Institute for Higher Education Policy, A Portrait of Low-Income Young Adults in Education, 2010, p. c.

<sup>23</sup> Kristen, C., *Bildungsentscheidungen und Bildungsungleichheit*, 1999, p. 16 (hier: authors' own translation).

<sup>24</sup> Boudon, R.: Limitations of Rational Choice Theory. The American Journal of Sociology, Vol. 29, p. 1. Cf. Becker, R., *Soziale Ungleichheit von Bildungschancen und Chancengerechtigkeit*, 2010, p. 167; Kristen, C., op. cit., p. 22.

<sup>26</sup> Boudon, R., 1998, op. cit., 817ff.; Boudon, R., 2003, op. cit., p. 1ff.

<sup>27</sup> Cf. Maaz, K., Baumert, J., Cortina, K., *Soziale und regionale Ungleichheit im deutschen Bildungssystem*, 2008, p. 223f.; Becker, R., *Entstehung und Reproduktion dauerhafter Bildungsungleichheiten*, 2009, p. 105ff.; also *Soziale Ungleichheit von Bildungschancen und Chancengerechtigkeit*, op. cit., p. 169f.; Maaz, K., op. cit., p. 52; Kristen, C., op. cit., p. 22.

<sup>28</sup> Bourdieu, P., *Ökonomisches Kapital, kulturelles Kapital, soziales Kapital*, 1983, p. 190f.

specific.<sup>29</sup> In his analyses, Bourdieu differentiates between three types of “capital”. He defines “economic capital” as all forms of economic resources which – on their own – do not, however, account for the position of an individual in society. Bourdieu sees “educational capital” to be “cultural capital”, comprising in addition to thought and behaviour patterns the possession of cultural goods and academic titles.<sup>30</sup> Bourdieu’s “social capital” is a stable social relationship network which enables the realization of mutual interests and shared help and advice. These three interconvertible and interchangeable<sup>31</sup> types of capital are characteristic of social status and are key elements in the social reproduction process.<sup>32</sup>

Owing to these differences emanating from social background in non-school education, children have different opportunities and chances of success right from the onset. The lower the social status, the smaller the cultural capital, the more limited academic success and the greater the social distance to university attendance. Children from such a family background lose out significantly more frequently than

their peers from more favourable social backgrounds when they encounter the selection mechanisms of the education system. The result is an uneven distribution of children from different social strata on existing educational trajectories and in educational institutions.<sup>33</sup> Primary social origin effects are the reason why children from lower-stratum families in Germany at the end of their primary schooling fail to be recommended for attendance of an academic secondary school (*Gymnasium*) but are steered away from the direct pathway to university. In best cases, they will eventually get a qualification to attend a university of applied science or will qualify for academic university attendance via adult education.<sup>34</sup> These primary effects also explain the various stratum-specific final high school grades and academic ability tests which give young people in the USA different opportunities to access the more successful and prestigious universities and colleges.

### 3.2 The Impact of Secondary Social Origin Effects

Whilst primary social origin effects describe the long-term impacts of stratum-specific socialization contexts on the creation and reproduction of educational inequality, the secondary effects of the social stratum to which a person belongs have short-term, direct impacts on educational opportunities. Boudon defines such secondary effects as social origin-specific differences in the cost and benefits deliberations

<sup>29</sup> Bourdieu gives no explanation as to how stratum-specific forms of habitus are created. His reproduction approach does not, then, represent a socialization theory; he is more concerned with the results of the socialization process. In fact, the process of intergenerational transmission of educational opportunities has as yet not been sufficiently researched and is referred to as a “black box”. Cf. Becker, R., Lauterbach, W., *Bildung als Privileg*, 2010, p. 18.

<sup>30</sup> Bourdieu depicts three types of cultural capital: embodied, objective and institutionalized cultural capital. The first has to do with “self” and impresses itself upon habitus; the second comprises in addition to the possession of cultural goods such as books or paintings also their usage and enjoyment and the visiting of cultural facilities; the last one facilitates access to educational institutions, jobs and consequentially to a position in the social hierarchy via the acquisition of qualification certificates. Bourdieu, P., op. cit., p. 190f., cf. Maaz, K., op. cit., p. 56 f.

<sup>31</sup> Bourdieu, P., op. cit., 190f.; Maaz, K., op. cit., p. 55.

<sup>32</sup> Cf. Maaz, K., op. cit., p. 55ff.; König, M., *Habitus und Rational Choice*, 2003, p. 53ff.; Maaz, K., Bauemrt, J., Cortina, K., op. cit., p. 207f.

<sup>33</sup> Cf. Hillmert, S., *Soziale Ungleichheit im Bildungsverlauf*, 2010, p. 87f.; Becker, R., *Entstehung und Reproduktion dauerhafter Bildungsungleichheiten*, 2009, p. 106f.; Becker, R., *Soziale Ungleichheit von Bildungschancen und Chancengerechtigkeit*, 2010, p. 169f.; Becker, R., *Soziale Ungleichheit von Bildungschancen und Chancengerechtigkeit*, 2010, p. 169f.; Maaz, K. op. cit., p. 52; Kristen, C., op. cit., p. 22.

<sup>34</sup> Cf. Becker, R., 2009, op. cit., p. 106f.; Becker, R., 2010, op. cit., p. 170f.,

on various forms of education and the ensuing choice of an occupational path.<sup>35</sup>

On the basis of the social position theory, which was developed by Keller and Zavalloni<sup>36</sup>, he observes the achieved or desired educational qualification in relation to the social status of the family in the social structure. Decisions in favour of or against a (further) educational step are always made within the context of a family's social position and thus represent their attitudes to education and their educational tradition. Individuals from a society's different strata pursue different educational aspirations because they are positioned at varying social distances to the targeted educational goals. Thus, children with academic parents have to cross considerably less social distance and educational hurdles on the path to tertiary education than children from educationally weak families. Owing to their high social status, the acquiring of university degrees is within reach whereas children from lower-status families need a much higher level of aspiration<sup>37</sup> if they are to decide in favour of university. Boudon links this to stratum-related inequalities in the number of university students, hypothesizing that the assessment of benefits and costs of an academic education differs in dependence on social background. The same costs for education are a heavier burden to bear for lower income families, whilst the educational benefits for students from lower social groups are not so large.<sup>38</sup>

<sup>35</sup> Cf. Boudon, R., 1998, op. cit., p. 817ff; Boudon, R., 2003, op. cit., p. 1; cf. Becker, R., 2009, op. cit. p. 107.

<sup>36</sup> Keller, S., Zavalloni, M., *Ambition and Social Class: A Respecification*. In: *Social Forces*, 1964, Vo. 43, No. 1, 58ff.

<sup>37</sup> Cf. Kristen, C., op. cit., p. 22f.; Maaz, K., Baumert J., Cortina, K., op. cit., p. 224; Maaz, K., op. cit., p. 66f.

<sup>38</sup> Boudon's approach diverges at this point from human capital theory, which assumes equal returns from equal educational qualifications for all groups of the population. Boudon, R., 1998, op. cit., p. 817ff; Boudon, R., 2003, op. cit., p. 1ff; cf. Becker, R., 2009, op. cit., p. 107f.; Hillmert, S., op. cit., p. 90; Kristen, C., op. cit., p. 23ff.; Müller, W., et al., *Hochschulbildung und soziale Ungleichheit* 2009, p. 293; Maaz, K., Baumert, J./Cortina, K., op. cit., p. 224; Maaz, K., op. cit., p. 66f.

The reason for the differing stratum-related rates of return is the risk of loss of status which threatens the more privileged stratum of society if they fail to invest in the academic education of their children. The choice in favour of university education is significantly more advantageous and profitable than it is for lower social groups. The latter are not dependent on university education for maintaining their status, and the attainment of the university entrance qualification followed by occupational training can ensure the intergenerational maintenance of status.<sup>39</sup>

Stratum-specific differences in the weighting of costs and benefits are the reason, then, why even in cases where academic performance is identical, young people from lower-income families forgo university much more frequently. Less accomplished young people with a "privileged" family background have – even if their academic performance is "middling" – a much greater chance of going on to university. Potential academic deficits or failures can be compensated by the available parental resources (e.g. coaching, private teachers, private boarding schools). Lower-status families do not have the necessary financial means or the necessary know-how for dealing with poor academic performance.<sup>40</sup>

The wish to maintain status and the short social distance to academic degrees motivate young people from high-status, high-income families to take up their studies at renowned universities and colleges in the most prestigious and profitable academic disciplines. The subjective viewpoint of young people from low-status families places more weight on the immediate costs of an educational option in comparison to what seems an uncertain profit at some point in the future. Owing to a lack of resources, planning is based on a shorter

<sup>39</sup> Cf. Becker, R., 2009, op. cit., p. 107f.; Müller, W., et al., op. cit., p. 293; Kristen, C., op. cit., p. 23; Maaz, K., op. cit., p. 67; Hillmert, S., op. cit., p. 98.

<sup>40</sup> Cf. Becker, R., 2009, op. cit., p. 117; Müller, W., et al., op. cit. P. 310f.



time horizon, within which time they have to gain their academic qualification. The educational decision is then made in favour of a comparatively secure profit which shorter academic programmes offer – mostly at less prestigious universities and colleges.<sup>41</sup> Boudon hypothesizes that with regard to the weighting of primary and secondary effects, the latter is of central importance to the emergence and reproduction of educational inequalities in modern societies.<sup>42</sup> The primary family origin effects form the basis of the stratum-specific inequality distribution of success opportunities at the beginning of an educational biography, and, perhaps take effect during the earliest transitions in the educational system. However, as these effects continue to have increasingly less impact, so the relevance of the secondary effects on the individual decision points along the educational path grows. Even a small impact of secondary effects suffices to cause marked social differentiation in educational participation.<sup>43</sup> In this context, we can understand the domination of financial grounds for not going to or dropping out of university over performance-related motives. Boudon's thesis which states that cost-benefit calculations vary according to social backgrounds when it comes to decision making about a university education or not, strengthens the claim that the financial secondary effects emanating from social background are the connecting factor for the structuring of personal financial contribution at university level. If it is a political policy in times of a "knowledge society and demographic change" to increasingly motivate those people to study who have otherwise shied away from a university education, then it should be taken into

consideration that the educational behaviour of the individual social strata after the achieving of the university entrance qualification (*Abitur*) is based on differences in the anticipated cost burden and the expected profits. The cost-benefit weighting with regard to the decision to go on to university or not can be significantly influenced by a socially acceptable type and extent of personal financial contributions and the availability of means for promoting and financing university studies.<sup>44</sup>

### 3.3 Institutional Explanation Approach

Apart from primary and secondary effects of social origin, the institutional structure of the education system also contributes to the creation and reproduction of unequal educational opportunities. Parental education decisions (secondary effects), which vary according to social background – are always made within the context – and according to the institutional guidelines of – the more or less stratified educational system. Furthermore, the selection mechanisms, which do not only relate to academic performance (primary effects), implement a stratum-specific distribution in existing educational pathways and institutions.<sup>45</sup>

Institutional explanation approaches with regard to educational inequality assume that there is a "central structuring effect" of the education system<sup>46</sup> on individual educational biographies and successes. Building on Boudon's theory of primary and secondary effects, they focus on the relationship between institutional framework conditions and individual educational decisions.<sup>47</sup>

If we examine educational inequality according to Boudon, that is, as a result of

<sup>41</sup> Cf. Müller, W., Pollak, R., *Weshalb gibt es so wenige Arbeiterkinder in Deutschlands Universitäten?*, 2010, p. 312; Becker, R., 2009, p. 109f.; Müller, W., et al., op. cit., p. 313; Hillmert, S., op. cit., p. 98.

<sup>42</sup> Boudon, R., 1998, op. cit., p. 817ff; Boudon, R., 2003, op. cit. p. 1ff.

<sup>43</sup> Cf. Müller, W. et al., op. cit., p. 313f.; Kristen, C., op. cit., p. 23; Maaz, K., op. cit., p. 67; Becker, R., 2009, op. cit., p. 108.

<sup>44</sup> However, one has to consider that educational decisions are not only derived from rational considerations. More often than not, they are based upon individual preferences and a lack of information.

<sup>45</sup> Cf. Hillmert, S., op. cit., 90ff.

<sup>46</sup> Hillmert, S., op. cit., p. 79.

<sup>47</sup> Cf. Becker, R., 2009, op. cit., p. 119.

consecutive educational decisions, which vary systematically in dependence on social stratum; decisions which have to be made by individuals or parents, at institutionally specified decision points in the educational system are of decisive significance.<sup>48</sup> When and how frequently these decisions occur within an educational biography, and how great the educational range on offer is, are decisive for the scope and the permanence of educational inequality. An educational choice that is made at these transition or branching points has – particularly in more restrictive educational systems – long-term, binding and practically irreversible consequences, which promote educational inequality for all following paths to be taken and for further educational and life opportunities.<sup>49</sup>

The German educational system has been criticized for a long time now in as far as its structure is claimed to promote social inequality, not only on account of the numerous decision situations it entails, but also the early filtering of children into parallel educational channels. Both are said to channel children into stratum-specific educational streams. After only four years of basic schooling, the first and most decisive turning point comes at the transition to *Hauptschule*, *Realschule*, *Gesamtschule* or *Gymnasium* schools. The decision taken at this point on the basis of parental wishes (secondary effect) and the primary school's performance assessment (primary effect) is a very unreliable one with regard to the academic performance abilities of children, and thus tends to be more orientated towards parental educational aspirations and parents' cost-benefit calculations rather than towards the actual abilities and skills of a child. The younger a child is at a decision point, the fewer indications are available as to whether he or she would be able to meet the requirements of a more sophisticated

educational option, such as the *Gymnasium* school. The younger a child is, the higher and heavier are the anticipated costs of such a long educational career. The lack of a guarantee of academic success and the anticipated high costs in combination cause educationally weak, low-income families to choose the less risky and less

costly educational option, i.e. they send their children to a *Hauptschule* or *Realschule* school.<sup>50</sup> Thus, the academic performance-independent social filter – which is observed at the threshold of university entrance – is already being implemented on the threshold of secondary education.<sup>51</sup>

On account of this enforced choice of secondary school form at such an early stage in an educational biography, a lot of potential university students are steered away from the direct path to a university education. Under the impact of secondary effects, socially homogeneous pupil populations and social background-specific learning environments are formed at the different types of school. This homogenous social structure at the German *Hauptschule* in particular is not beneficial for the development and academic performance of the children there, and thus questions the multiplicity of the German educational system.<sup>52</sup>

Apart from the early strategic decision at the end of primary schooling, the German education system implements a number of further selection mechanisms during an educational career. The decision-intensive,

<sup>48</sup> Boudon, R., 1998, op. cit., p. 817ff; Boudon, R., 2003, op. cit., p. 1ff.

<sup>49</sup> Cf. Becker, R., Lauterbach, W., op. cit., p. 33; Kristen, C., op. cit., p. 16f

<sup>50</sup> Cf. Geißler, R., *Bildungschancen und soziale Herkunft*, 2006, p. 44; Becker, R., 2009, op. cit., p. 119f.; also 2010, op. cit., 166f.; Maaz, K., Baumert, J., Cortina, K., op. cit., p. 221; Becker, R., Lauterbach, W., op. cit., p. 31ff.; Müller, W., Pollak, R., op. cit., p. 309.

<sup>51</sup> Furthermore, studies have shown that the recommendations given at the end of the *Grundschule* primary school are not solely performance-related, but are also oriented towards the social background of the child. Cf. Geißler, R., *Die Sozialstruktur Deutschlands*, 2008, p. 292; Maaz, K., Baumert, J., Cortina, K., op. cit., p. 221.

<sup>52</sup> Cf., Geißler, R., 2006, op. cit., p. 44f; Becker, R., Lauterbach, W., op. cit., p. 34; Maaz, K., Baumert, J., Cortina, K., op. cit., p. 222; Hillmert, S., op. cit., p. 88.

highly differentiating parallel structure of the German education system enforces at the end of each educational phase a fundamental decision between remaining in education or entering the workforce. At each decision stage, social background effects come into play, so that at each educational stage the social selectivity and social background-specific similarities of the pupils tends to increase.<sup>53</sup> In the course of educational expansion and the changes in the significance of the university entrance qualification *Abitur* this effect has relocated up to a higher level. Children from educationally weak and low-income social strata are increasingly choosing to gain their *Abitur* qualification, but not in order to move on to university but to be more successful in gaining an apprenticeship or job-training in the occupation of their choice. The decrease in social disparities on the path towards *Abitur* is, consequentially, going hand in hand with an increase in such disparities after that qualification has been gained.<sup>54</sup>

At each individual branching point of the German education system, the educational decision that has to be made there is always dependent on the available choice of alternative options. Depending on the chosen educational path and on barriers to access, participants in German education encounter a broad spectrum of educational alternatives<sup>55</sup>, including the gaining of such a qualification either by the direct path or an indirect path – either full time or in parallel with a job – the entering into “dual vocational training” – either as a combination or vocational college plus job or a university of applied science plus job – or getting a job with training or without training, etc.<sup>56</sup> Substantially “distracting”

effects away from the direct path to a university degree emanate particularly from the system of vocational education. This possibility of embarking on vocational training, which leads to a full occupational qualification at the end of it, is already impacting on the educational behaviour of the educational weak and low-income social strata at the end of primary education when a decision has to be made with regard to secondary schooling. The chance of secure, inexpensive occupational training has a lot to do with the different social background-related educational behaviour, steering individuals away from university attendance,<sup>57</sup> although a university degree would be more profitable in the long-term.

In contrast with Germany's education system with all its ramifications, the USA's system is structured as a straight line. After finishing Elementary School – the U.S. equivalent of the German primary school *Grundschule*, children move on to the High School at the age of about 10.<sup>58</sup> It is the aim of all American schoolchildren to gain their High School Diploma after 12 years at the school and this qualification forms the basis for all other educational steps.<sup>59</sup> In contrast with Germany, the U.S. implements vertical

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other options and their respective consequences. However, it is doubtful whether parents in low-income and educationally weak families have the relevant life experience and education to be in a situation to weigh up the pros and cons of higher education. There is insufficient research as yet to indicate whether socially selective information behaviour is involved. It is assumed that the various social groups base their decisions on familiar, “tried-and-tested” experiences. Cf. Becker, R., 2009, op. cit., p. 105; Hilmert, S., op. cit., p. 99ff; Becker, R., Lauterbach, W., op. cit., p. 35.  
<sup>57</sup> Cf. Becker, R., 2009, op. cit., p. 104; Müller, W., Pollak, R., op. cit., p. 310ff.; Müller, W. et al., op. cit., p. 287ff.

<sup>58</sup> Depending on the federal state, the High School is split into Junior High School or Middle School (classes 7-9) and Senior High School (classes 10-12). In some states, there are so-called Combined Junior-Senior High Schools. Cf. Pan America Corporation, Primary Education, 2008.

<sup>59</sup> The length of compulsory education is varied according to the individual federal states. It begins at the age of at least 5, at most 8 years and ends at the age of 16 to 18. Cf. National Conference for State Legislatures, Compulsory Education, 2010.

<sup>53</sup> Cf. Müller, W., et al., op. cit., p. 292; Kristen, C., op. cit., p. 16f.

<sup>54</sup> Cf. Müller, W., et al., op. cit., p. 292f.

<sup>55</sup> It should be noted that once educational decisions have been made, the choice at other further branching points may be severely limited on account of these prior decisions. In addition, access to certain educational paths may remain barred on account of formal barriers such as minimum grades.

<sup>56</sup> In an ideal case, a decision in favour of a particular educational path has already involved knowledge of all

differentiation, i.e. it is not the objective to “stream” children into specific types of schools depending on their academic skills and performance.<sup>60</sup> Owing to this institutionally regulated, uniformly linear educational path in the USA, the schoolchildren there display at the age of about 17 only slight deviations in their previous school careers. For U.S. children, then, there is a long period of time over which children of the same age have – at least formally – easier access to tertiary education.

However, despite uniform and linear schooling, a closer look reveals that there are still substantial social disparities at High School level. Depending on the residential area in which a High School is located, schools differ considerably with regard to the social make-up of their students, the competency of their teachers and the chances of gaining the High School Diploma.<sup>61</sup> Depending on the residential area, there is a high concentration of students from the same or similar social background, forming the same learning environments and homogeneous social groups – just as we have identified for German schools. The huge gap between so-called high poverty and low poverty Schools is becoming a big problem, both on a social and individual level: at the 16,122 high poverty Schools at primary and secondary levels, more than three quarters of children there come from very poor families and from ethnic minorities. The teachers themselves hold inferior university degrees and have less professional experience. The crime rates are higher and academic performance is significantly lower than the average at low poverty schools.<sup>62</sup>

<sup>60</sup> Children with learning difficulties receive extra support either within the class or in small groups; extraordinarily gifted children have the possibility to attend higher classes or to skip grades. Cf. Pan America Corporation, USA Education System, 2008.

<sup>61</sup> Cf. NCES, The Condition of Education 2010, op. cit., p. 5ff.; Schreiterer, U., *Eine Frage des Geldes*, 2008; Haveman, R.; Smeeding, T., op. cit., 2006, p. 12.

<sup>62</sup> Conditions at low poverty schools are diametrically opposed: a maximum of one quarter of the students are poor; the majority of them are white; about half of the teachers hold a Master's degree and have enough academic experience; the crime rate is low and

Children from this type of High School environment have less chance of success and a brighter future: only 68% of the students at high poverty schools gained their Diploma in 2007/2008; in 1999/2000 it was still 86%. Only 28% of them went on to take a 4-year university degree programme.<sup>63</sup>

The example of U.S. High Schools shows that comprehensive schooling does not necessarily go hand-in-hand with equal education opportunities. Social (self) selection mechanisms trigger off stratum-related differentiation even in comprehensive school forms. The sparsely available private High Schools in the USA (approx. 11%), which children from high-income families enrol in, in the hope of gaining entrance to a prestigious college or university, also play their part in his process of differentiation. In contrast to the normal, non-fee paying state-run High Schools, the so-called College Preparatory Schools are well known for their selective acceptance of students, intensive preparation for university entrance and high entrance rates for elite colleges and universities.<sup>64</sup>

Owing to the modular structure and low restrictiveness of tertiary education in the USA, we can assume that there is no “distraction” away from university entrance in the form of alternative education paths – such as Germany's vocational education system. Thus, building on an “Associate Degree”, offered by the 2-year institutions, within 2 further years, the Bachelor Degree can be gained at a 4-year university.<sup>65</sup> In Germany, however, it is not usually possible to shorten the length of a university degree programme by being granted credit

academic performance is substantially better than at high poverty schools. Cf. NCES, The Condition of Education 2010, op. cit., p. 5ff.

<sup>63</sup> In comparison, the graduation rate at low poverty schools has remained at a constant 91%; the transition rate to 4-year colleges/universities is 52%. Cf. NCES, The Condition of Education 2010, op. cit., p. 17.

<sup>64</sup> Cf. Fabrikant, G., At Elite Prep Schools, 26.01.2008; Hartmann, M., *Elite und Masse*, no year, p. 7; Schreiterer, U., op. cit.

<sup>65</sup> Cf. Havemann, R., Smeeding, S., op. cit., p. 15f.

points from a vocational training programme.<sup>66</sup>

The analysis of the structure of education systems in the USA and in Germany with regard to their potential for causing inequality effects shows that an education system – depending on its institutional organization – can contribute significantly to the creation and reproduction of unequal educational opportunities. The plethora of selection stages, the multiplicity and high restrictiveness of the German system offer considerable scope for the impact of primary and secondary effects of social origin. In contrast, the specific structure of the American system is, owing to its linear, consecutive structure, less selective and stratifying. The low number of decision points and high permeability mean that educational decisions do not have to be made so often, are not so profound and are easier to rectify.

Access to American and German universities/colleges is characterized by the contradictory contexts of “opening up” and “restriction”.<sup>67</sup> Academic education is of great interest from both a micro- and macro-economic perspective, but limited capacities, quality standards and academic performance requirements act restrictively on students’ access to university.<sup>68</sup>

In Germany, university entrance is subject to the gaining of the “pure” *Abitur* qualification or the *Fachabitur* (a more specialized qualification enabling the holder to study at a university of applied science. Depending on the discipline to be studied, there are formal requirements (such as the *numerus clausus*, which requires specific grades in the *Abitur* examinations), or knowledge of certain foreign languages. Although the German *Hochschulrahmengesetz* (HRG) provides a whole catalogue of potentially applicable selection criteria, including assessment centres, general and

specific aptitude tests, etc., these elements are – mainly on account of a lack of capacities – only applied for 8% of the study programmes. The decisive criterion for student selection by universities continues to be the average grade of a student’s *Abitur* examinations.<sup>69</sup>

In the decentralized education system of the USA, the individual institutions may make their autonomous decisions about the acceptance or rejection of student candidates. Depending on their status, the universities put this entitlement to various degrees of use: within the framework of open admission policy, a lot of non-selective universities and colleges (as a rule, the less prestigious, state-run Community Colleges) demand only the High School Diploma as the entrance requirement. In combination with considerably lower tuition fees, they primarily attract students from low-income families.<sup>70</sup> For the more selective and prestigious universities and colleges, however, a decisive competitive element is the selection of the best candidates: the more selective, prestigious and elite the college, the more excellent the academic achievements there, the higher the institution’s position in national and international rankings and the higher the revenue from fees, sponsorships, etc.<sup>71</sup>

The great importance of prestige and revenue in the competitive arena of tertiary education accounts for the very meticulous student selection process<sup>72</sup>, which is not only based on meritocratic criteria. This is clearly demonstrated by the so-called scholastic achievement test (SAT) – one of the standardized aptitude tests implemen

<sup>66</sup> Cf. Müller, W., Pollak, R., op. cit., p. 311.

<sup>67</sup> Becker, R., Lauterbach, W., op. cit., p. 28.

<sup>68</sup> Cf. Ibid.

<sup>69</sup> Cf. Friedmann, J., *Rolle rückwärts*, 2007; Hartmann, M., op. cit., p. 2; Hillmert, S., op. cit., p. 95.

<sup>70</sup> Cf. Rothfuß, A., *Hochschulen in den USA und in Deutschland*, 1007, p. 162ff.

<sup>71</sup> Cf. Rothfuß, A., op. cit., p. 164f; *Hochschul-Informationssystem* (Ed.): *Warum sind die amerikanischen Spitzenuniversitäten so erfolgreich?* Kurzinformation A7/2005, p. 16.

<sup>72</sup> Current selection criteria of selective universities in the USA are – apart from the High School qualification, aptitude tests, letters of recommendation, interviews, CVs, community work etc. Cf. Rothfuß, A., op. cit., p. 170ff.

ted by many US universities and colleges, which tests candidates' intellectual capabilities.<sup>73</sup> A detailed comparison of the results of new students at various universities and colleges, shows however that those with the highest scores do not go to the best institutions nor do the best colleges actually select those candidates with the best scores.<sup>74</sup> If we disregard the fact that the results of the SAT tests correlate highly with social background (primary effect) then the high tuition fees at those institutions cause many high school graduates who have excellent results not to even attempt to apply to these institutions. Differences in the extent of tuition fees effect a (desired?) pre-selection of applicants in dependence on their family income. The complex process of application involved in getting student grants/scholarships etc. and the uncertainty about receiving such financial means and whether they will be sufficient, also contribute to this pre-selection process.<sup>75</sup>

The principles of equality in education and social equality stand face-to-face with the application of personal criteria in the applicant selection process. The recruiting of candidates whose character and personality fit into the institution and who are likely to be a credit to it both academically and personally, is oriented considerably towards social background. Those high school graduates who stem from similar social backgrounds to the rest of the academic community – in Bordieus's terminology "a good social fit" are rewarded with the offer of a place at that particular college or university.<sup>76</sup>

Particularly discriminating are the so-called legacy preferences, which directly favour children whose parents have attended the same college. In order to retain loyal alumni, who are prepared to donate large sums to their old universities and

colleges, practically all the elite universities and colleges in the USA have informal selection ratios of 10-25% "alumni children".<sup>77</sup> The donations of the college alumni are not only of an altruistic nature; parents often have their children's academic education foremost in their minds. In times of rising costs and diminishing university endowments, universities are increasingly willing to fulfil their donors' expectations.<sup>78</sup> When applying legacy preferences, American universities are consciously lowering their selection criteria by granting those students admission who – under more "normal" circumstances, would not have been academically proficient enough.

To sum up, American universities and colleges are not equally accessible for potential students from all the different social strata. Owing to its straight-lined, uniform structure, the US education systems guides most of America's young people towards a university career, but particularly admission to the prestigious elite institutions- which promise the best career opportunities – are not open to candidates with a lower status social background. The low level of social inequality at primary and secondary educational levels is compensated for by a more strict selection at tertiary level. American elite universities and colleges are examples of intergenerational status reproduction via educational institutions. A candidate with the right "habitus", the necessary economic and social capital, good academic skills (primary effect) and status-oriented educational aspiration goals (secondary effect) gains access to the best institutions.

<sup>73</sup> Cf. *ibid.*, p. 171.

<sup>74</sup> Cf. Hartmann, M., *op. cit.*, p. 5.

<sup>75</sup> Cf. Hartmann, M., *op. cit.*, p. 7; Haveman, R., *smeeding*, T., *op. cit.*, p. 12.

<sup>76</sup> Cf. Hartmann, M., *op. cit.*, p. 7; Rothfuß, A., *op. cit.*, p. 173f.

<sup>77</sup> Cf. Kahlenberg, R., 10 Myths About Legacy Preferences in College Admissions, 2010.

<sup>78</sup> The assumed positive interdependency between legacy preferences and donations or the endowment volume could not be empirically proven. On the contrary, at 7 universities, the abolition of legacy preferences did not have a negative impact on the flow of donations. Cf. Hartmann, M., *op. cit.*, p. 7f.; Kahlenberg, R., *op. cit.*; more detailed in Golden, D., *An Analytic Survey of Legacy Preference*, 2010, p. 71ff.

With few formal requirements being the only admission criteria, access to German universities in contrast is rather open and comparatively unrestricted. However, it should be kept in mind that due to the described selection at early stages in the German educational system prospective students in Germany already form a well-selected, homogeneous and elite group that

probably needs no further selection. Though, with regard to the German Universities Excellence Initiative and their tendency to increasingly create a competitive profile, it can be assumed that further selection criteria will be applied by German tertiary institutions in future.

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