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Chapter 4

Status Attainment and Wealth in the United States and Germany

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OUR EFFORTS to understand the channels through which socioeconomic advantage is transmitted across generations rely on a crucial condition: we need to identify correctly the main ingredients of advantage. In other words, we need comprehensive concepts and measures of social background. Most research on intergenerational mobility draws on indicators of educational attainment, occupational status, and income to describe the position of families and associated opportunities for children. One important feature of the economic circumstances of families that is less often included in these studies is family wealth, or net worth. Wealth is a dimension of economic well-being that presents particularly stark inequalities. Researchers have documented that the distribution of wealth is far more unequal than the distribution of income (Keister and Moller 2000; Wolff 2006) and that it is subject to especially strong racial and ethnic inequalities (Oliver and Shapiro 1997; Scholz and Levine 2004; Hao 2007). Severe inequalities in family wealth may create unequal opportunities for children over and above the socioeconomic characteristics of families traditionally included in research on intergenerational mobility.

A few contributions have detected independent effects of parental wealth on children's educational opportunities for the United States. Dalton Conley (1999, 2001) finds a strong association between a family's wealth position and the educational attainment of its offspring. Parental wealth appears to play a central role in conferring educational advantage on children independent of other socioeconomic characteristics of families. Although the important role of parental wealth for educational success has been confirmed in other instances (see, for example, Morgan and Kim 2006; Haveman and Wilson 2007; Belley and Lochner 2007), it seems fair to say that the empirical study of intergenerational wealth effects is still in its early stages compared to most other topics in the field of intergenerational

mobility research (for an overview, see Grawe 2008). The main reason for this circumstance lies in the fact that there are significantly fewer data sources available that include reliable indicators of wealth holdings.

The study of inequality in opportunities has a long history. For several decades, sociologists have studied this topic under a common framework—namely, *status attainment research*. Status attainment models have been developed in Peter Blau and Otis Dudley Duncan's seminal work, *The American Occupational Structure* (1967), to estimate the relative effects of different background characteristics on individuals' educational and occupational success. Blau and Duncan's approach to the study of the reproduction of social inequalities might be the single most replicated model that sociology has seen. Over several decades, it has been extended, modified, confirmed, and criticized (Campbell 1983; Ganzeboom, Treiman, and Ultee 1991). One especially persistent critique of these models comes from Samuel Bowles (1972) and Bowles and Herbert Gintis (2002), who have repeatedly suggested that standard status attainment models yield a biased picture of the determinants of attainment because they fail to include important socioeconomic background characteristics, particularly parental wealth. The first contribution of this chapter, then, is to update the classical status attainment model and investigate how wealth alters the conclusions about the central factors in the intergenerational transmission of advantage that researchers have drawn from this model. It does so by documenting the association between parental wealth and not only children's final educational status but also their early occupational attainment.¹

So far, research on the relationship between parental wealth and offspring's life chances has been largely confined to the United States. We therefore do not know whether the relationship between wealth inequality and inequality in opportunities is unique to the United States or a hallmark of all industrialized nations.² Owing to the restricted availability of appropriate data, the only other nation for which we can use survey data to study intergenerational wealth effects of the kind considered here is Germany. In many ways, the German welfare state builds a rich contrast to the U.S. context and has served as a fruitful comparative case in much research on intergenerational mobility processes (see, for example, DiPrete 2002). With surprisingly similar levels of wealth inequality (see Jäntti, Sierminska, and Smeeding 2008; Wolff 2006), Germany is also an ideal case to investigate the importance of institutional arrangements in strengthening or attenuating the link between wealth inequality and inequality in opportunities. This chapter thus also attempts to provide a first institutional perspective on the importance of wealth for children's life chances. I offer theoretical arguments for why parental wealth may constitute an important ingredient of advantage in the United States and why the role of wealth in the status attainment process might be different in Germany.

Wealth As a "Transformative Asset"

For Aage Sørensen (2000), a person's social class position is based on the sum of assets that he or she controls through property rights. In this framework, wealth constitutes the central dimension of "class as life conditions" (see also Spilerman 2000). To understand why these life conditions based on wealth may translate into attainment opportunities for the next generation, it is helpful to draw on recent qualitative research from Thomas Shapiro (2004, 10) in which he proposes viewing parental assets as "transformative assets that lift [children] beyond their own achievement." Based on this framework and prior evidence, I posit that the transformation of monetary well-being into attainment opportunities can occur in three direct ways.

First, as Shapiro's ethnographic work vividly shows, the main wealth-building strategy in most families, the purchase of a home, is primarily driven by parents' assessment of the educational opportunities that residential neighborhoods and their schools offer to their children. By purchasing homes in certain neighborhoods, parents choose "life conditions" conducive to their children's educational success. I therefore hypothesize that parental wealth—the central component of which is housing wealth—serves as a genuine economic resource that funds access to valuable educational resources at the primary and secondary education levels. Advantages arising from parental wealth are thus not limited to what many economists in the field of wealth studies focus on—namely, bequests and inter vivos transfers (Kessler and Masson 1988)—but may instead accrue much earlier in the form of *de facto* purchases of educational resources.

Second, the purchasing function of parental wealth may be even more apparent at the postsecondary level. Significant tuition and living costs may often not be met by parents' disposable income but instead require families to draw on some form of savings or home equity-based lending. The need for economic support is by no means restricted to college access, but such support is equally important for college persistence and completion. Of course, there is a long-standing and controversial literature on the existence of credit constraints in college—that is, the question of whether perfect credit markets provide lending opportunities to those whose need for funding for postsecondary education cannot be met by their families (see Cameron and Taber 2004). Although the theory of credit constraints discusses the importance of parental wealth early on (Becker and Tomes 1986), the empirical literature in this field counts far more contributions that study the relationship between parental income and educational outcomes. Again, the reason is that much more data on income are readily available than data on wealth. More recent contributions, however, demonstrate that the empirical consideration of parental wealth

suggests important credit constraints in access to college (Belley and Lochner 2007; Lovenheim, forthcoming). But even if credit markets could match the functions of parental wealth, the educational advantages associated with the latter may still extend beyond the attainment of a first college degree. Student debt—which is likely to be accumulated by students from less-wealthy families—has been shown to be associated with lower propensities to seek postgraduate education (see Millett 2003).

Third, the effects of parental wealth may extend beyond educational attainment to directly confer additional labor market advantages. Parental wealth can be hypothesized to take on an insurance function for both initial job search and early career mobility by providing “important real and psychological safety nets” (Shapiro 2004, 11). A *real safety net* for costly job searches prevents a low reservation wage at job market entry and its rapid decline in times of unemployment. In other words, such a safety net permits offspring to maintain job searches until a satisfying job offer is attained. This may be particularly important when freshly graduated college students face the challenge of paying off accumulated student debt. As a *psychological safety net*, parental wealth may additionally serve to expand the range of occupational options considered and facilitate the decision to apply for more competitive, high-status occupations.

The distinction between the purchasing and insurance functions of wealth should not be construed as strictly exclusive explanations of wealth effects on only education and only occupation, respectively. The insurance function of wealth may also play an important role for educational attainment insofar as it determines the discount rate applied to future labor market prospects and thereby influences the investment decisions involved in educational choices (such as, but not limited to, the decision to borrow for college).

Thus far, I have laid out several hypotheses on how parental wealth could exert direct effects on children’s status attainment. However, the observed associations could also arise, at least in part, from unobserved—and potentially unobservable—characteristics of parents that are responsible for their propensity not only to accumulate assets but to foster the educational attainment of their children. I am alluding to a different perspective on wealth that considers it to be merely a less error-prone measure of “permanent income” and therefore a more adequate proxy for differential consumption patterns (see, for example, Burkhauser, Frick, and Schwarze 1997; Moon and Smolensky 1977). In neoclassical economics, different wealth positions simply indicate a postponement of consumption and therefore result from differential savings propensities. This framework also suggests a range of factors that may determine savings propensities, such as different levels of risk aversion, the discount rates of the future, and altruistic preferences for bequesting to one’s offspring (see also Becker and Tomes 1986). All of these might be unobserved char-

acteristics of parents that underlie the association between wealth and attainment. For instance, families’ wealth positions may derive from their level of risk aversion, and risk aversion, in turn, might be transmitted to children (Dohmen et al., forthcoming), influencing their willingness to make long-term educational investments, such as college or graduate school, or to build steady career patterns in highly competitive occupations.³ These and similar lines of reasoning would thus suggest that instead of *carrying* different behavioral implications for children, family wealth *derives* from different behaviors of parents that also account for the intergenerational transmission of advantage.

Although the hypotheses listed so far have been largely devised in reference to the United States, their importance can be assumed to differ by national context. In the following section, I outline how specific features of the U.S. and German education systems and welfare states may be expected to intensify or moderate the hypothesized intergenerational effects of wealth (see table 4.1). I should stress that this chapter does not investigate cross-national differences in the total degree of intergenerational mobility, but rather whether different components of social background, specifically parental wealth, are associated differently with children’s opportunities. Hence, I do not posit reasons why one country may permit more or less intergenerational mobility, but rather why the association between wealth and attainment may be stronger in one country than the other.

Let us start with the ability to acquire access to educational resources through homeownership and home equity. Such access is made possible by the localized funding structure of public education in the United States, where property taxes are the main revenue for educational expenditures on the primary and secondary levels. By educational resources I do not primarily refer to school resources—which have, at best, small effects on educational outcomes (Hanushek 1986, 1997; but see also Hedges,

Table 4.1 Summary of Hypotheses

| Theoretical Mechanism | United States | Germany |
|---|---------------|---------|
| Homeownership and quality of neighborhood and schools | + | – |
| Direct monetary resource, specifically for higher education | + | – |
| Insurance function for educational decisionmaking and labor market entry and mobility | + | – |
| Unobserved parental characteristics | ? | ? |

Source: Author’s compilation.

Note: +/– denotes that the mechanism is hypothesized to be stronger, weaker, or similar when the two countries are compared.

Laine, and Greenwald 1994; Greenwald, Hedges, and Laine 1996)—but to advantageous contexts based on the composition of the student body and the neighborhood population (see Coleman et al. 1966). From this perspective, the most consequential feature of the localized funding structure of the U.S. education system might not be the resulting differences in school resources but the incentive it sets for wealthy parents to select into different neighborhoods. As mentioned earlier, Shapiro (2004) shows that, for wealthy parents, perceived school quality is indeed the main factor in choosing a neighborhood.

In Germany, school choice is no less of an issue in parents' strategies to secure educational opportunities for their children. However, educational resources show less variation across different neighborhoods than across different school types. Entry into the "right" track of the highly differentiated German education system is much less determined by residential choices than by parents' knowledge of and own prior success in navigating the complex pathways of the German system (see Pfeffer 2008).

On the postsecondary level, cross-national differences may be more readily apparent. High tuition costs are a salient feature of the U.S. system, and the financial aid system explicitly disregards some aspects of wealth in determinations of need-based aid. The German higher education system, in contrast, has traditionally been tuition-free (although this is changing). In addition, living costs are partly covered by a need-based aid system—which, however, also fails to take into account parental wealth. Overall, the lower total cost associated with attaining a postsecondary education should nevertheless make parents' savings or borrowing potential a less consequential resource in Germany.

Regarding occupational attainment, it can be noted that the degree to which parental wealth is required to provide a safety net for job searches and occupational mobility depends fundamentally on the existence of alternative public provisions of such an insurance function. For instance, Markus Gangl's (2004) work on the consequences of unemployment spells for future career trajectories shows that relatively generous unemployment benefits in Germany provide a real safety net for continued growth in occupational status, while such public provision does not exist to the same degree in the United States. In the latter case, parental wealth may provide a functional substitute for continuing job searches and maintaining reservation wages. In addition, the psychological benefit that young adults derive from their parents' wealth might be more consequential in the more volatile U.S. job market than is the case with the relatively static German labor market (Carroll and Mayer 1986).

Based on these fundamental differences in the institutional setup of the U.S. and German education and welfare systems, we should expect the overall relationship between wealth and status attainment to be stronger in the United States than in Germany. In the United States, parental wealth

may take on important functions for educational and occupational success that are partly made dispensable in Germany by the public provision of education and social insurance (see also Conley and Gifford 2006). However, the possibility that intergenerational wealth effects may be driven by unobserved parental characteristics, as described earlier, makes this prediction (and the interpretation of results) more hazardous. The analyses reported here do not attempt to identify which of the hypothesized mechanisms drive the observed effects. They are instead meant to reveal an additional dimension of intergenerational mobility and to provide initial comparative evidence that will inspire further research into the underlying causal mechanisms of intergenerational mobility as it relates to wealth.

Data and Methods

It is notoriously difficult for children to report accurately on their parents' socioeconomic status, and it is virtually impossible to gather detailed information from them about their parents' asset holdings. Studies such as this one therefore need to rely on wealth data collected directly from parents. Worldwide, there are only three panel surveys available that not only have that information but also track the educational careers of children for a sufficient period to enable the observation of final educational and early occupational attainment: the U.S. National Longitudinal Survey of Youth (NLSY79), the U.S. Panel Study of Income Dynamics (PSID), and the German Socio-Economic Panel (GSOEP). The NLSY began in 1979 with a sample of approximately 12,700 adults between the ages of fourteen and twenty-two. Children born to female panel members are tracked in the NLSY79 Child and Young Adult Supplement (Center for Human Resource Research 2008). The PSID is the longest-running nationally representative panel study in the world. It began in 1968 with approximately 4,800 households, and it continues to interview all original sample members and split-off households, such as those of children (Brown and Schoeni 2007). The GSOEP is Germany's largest panel study, partly modeled after the PSID. It began in 1984 with 6,000 households living in the Federal Republic of Germany and was expanded to the former German Democratic Republic after the fall of the Berlin Wall (Wagner, Frick, and Schupp 2007).

The analytic sample consists of children of households that participated in the 1989 wave of the U.S. surveys and the 1988 wave of the German survey, which all included a full-fledged module to measure household wealth. Being of school age in those base years, these children have reached ages twenty-three to thirty-five in the latest available waves of the NLSY (2006, $N = 2,497$) and the GSOEP (2007, $N = 745$) and are ages twenty-four to thirty-six in the latest available PSID wave (2007, $N = 1,665$).

The measures of wealth in these surveys are fairly comprehensive and provide information separately for each asset type—namely, savings

Table 4.2 Distribution of Wealth in the United States and Germany

| | NLSY (1989) | PSID (1989) | GSOEP (1988) |
|--------------------------------|-------------|-------------|--------------|
| Gini coefficient | 0.85 | 0.76 | 0.79 |
| Wealth share of top 5 percent | 56.9% | 42.1% | 33.0% |
| Wealth share of top 20 percent | 83.1% | 71.5% | 73.2% |

Source: Author's calculations based on data from National Longitudinal Survey of Youth (Center for Human Resource Research 2008), Panel Study of Income Dynamics (Brown and Schoeni 2007), and German Socio-Economic Panel (Wagner, Frick, and Schupp 2007).

Note: Based on analytic sample.

accounts, stocks, business holdings, real estate, home equity, and debts. Like previous research on intergenerational wealth effects, this analysis relies on a measure of *net worth* (total wealth minus debts). Table 4.2 gives a picture of the highly unequal distribution of family wealth. These inequality measures are reported for the analytic population—that is, households with school-age children in 1988 or 1989. They confirm what more recent cross-national comparisons of wealth distributions have also shown (see Wolff 2006; Jäntti et al. 2008): wealth is very highly unequally distributed in both the United States and Germany. In fact, the level of wealth inequality in the GSOEP sample lies between that based on the NLSY and the PSID when we compare the Gini coefficient of wealth and the share of wealth held by the top 20 percent of wealth holders. Only at the very top of the distribution does wealth seem to be more polarized in the United States compared to Germany. While the wealthiest 5 percent hold about one-third of all wealth in Germany, they appear to hold up to (PSID) or even more than (NLSY) half of all wealth in the United States (see also Jäntti et al. 2008).

For the empirical models, the net worth measure is assigned a ceiling value of \$1 million (1989, purchasing power parity) and log-transformed to reduce skew. Cases of zero and negative wealth are set to \$500. Additional analyses (not shown) test different floor values and include the amount of net debt as an additional indicator of a household's wealth position and yield the same substantive results. Remaining indicators of a family's socioeconomic standing are the highest number of years of education completed by either parent, the highest socioeconomic index score (SEI) (Frederick and Hauser 2008) of either parent's occupation, and the (natural logarithm of) family income averaged across five income years ("permanent income") and adjusted for household size ($1/hsize$).⁴ Educational attainment is measured as the total number of years of education attained, and occupational attainment as the SEI score of the current main occupation. The choice of these measures is driven by an effort to replicate the classical variables used in status attainment research. Missing

values on all variables are multiply imputed, drawing on the Stata ICE module (which applies regression switching methods; see Royston 2005).

Several methodological problems challenge the analysis of wealth data collected from large national surveys. First, nonresponse to asset questions is relatively high and may introduce substantial bias. While the data providers of the NLSY and PSID already provide imputations of missing wealth values (based on cross-wave interpolation and hot deck imputation, respectively), I collaborated with the data providers of the GSOEP to implement a similar multiple imputation strategy for the German data (see Frick and Pfeffer 2011). Second, the issue of measurement error in survey reports of socioeconomic standing—which looms especially large in data on wealth—is addressed by using measures from two points in time for all variables included in this analysis.⁵ Third, although the wealth measures used in the three surveys are very similar (the GSOEP has historically been modeled after the PSID), it would be highly problematic to assume that the wealth survey items measure exactly the same across surveys and do so equally well (see Sierminska, Brandolini, and Smeeding 2008). For the United States, the use of two independent data sources is meant to yield further confidence in the stability of the findings. Additional sensitivity analyses also suggest that the cross-national comparison is robust to the possibility of different levels of wealth measurement error across these data sets.⁶

As described, this chapter draws on widely used methods of status attainment research. Status attainment models are structural equation models that estimate the direct and indirect effects of an individual's social background on his or her educational and occupational attainment. I follow the common practice of labeling these estimated coefficients "effects" while stressing that they are estimated under specific assumptions about potential causality and, for the reasons mentioned earlier, are not meant to yield direct causal evidence—a point that has been stressed from the outset by the creators of path analysis (Duncan 1966; Wright 1934). The visual display of the estimation results occurs via path diagrams in which directed arrows indicate direct effects and curved, undirected arrows indicate unanalyzed correlations. Path coefficients can be interpreted as standardized linear regression coefficients (directed arrows) and simple correlation coefficients (curved arrows). The inclusion and exclusion of any specific effect is based on considerations of model fit. The latter is not discussed in detail here; suffice to say that all of the presented models fulfill standard statistical criteria for satisfactory model fit (see appendix tables 4A.1 to 4A.3). The models estimated here also include a "measurement model." This part of the model not only specifies that each (latent) variable is measured by two variables observed at two different points in time, but also allows for measurement error in each variable as well as some selected correlations among these measurement

errors. To further facilitate the focus on the substantive (structural) part of the models, there is no further discussion of the measurement part of the estimated models here, nor is it included in the path diagrams (but see appendix and notes 5 and 6).

Results

To assess how the inclusion of wealth alters conclusions drawn from status attainment models, I begin by replicating the standard model of status attainment, which includes only parental education, parental occupation, and family income as background characteristics. In a second step, I add the net worth measure and observe its effects on educational and occupational attainment as well as the resulting changes in the general structure of the intergenerational transmission of advantage. The resulting path diagrams are displayed in figures 4.1 and 4.2 for the United States and in figure 4.3 for Germany. All solid lines stand for statistically significant effects ($p < .05$), and a dashed line indicates an effect that does not reach statistical significance but is still included for illustrative purposes.

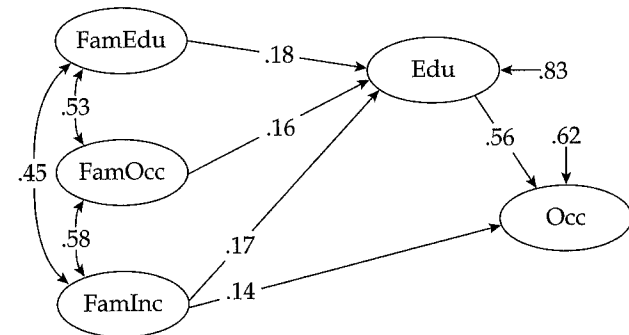
Wealth Effects in the United States

In the standard models of status attainment in the United States (figures 4.1 and 4.2), parental education exerts the strongest effects on children's attainment compared to other indicators of social background. This finding is more pronounced with the PSID data than with the NLSY data, but it corresponds well to the common result of most analyses of intergenerational mobility processes. Controlling for parental education, we see that parents' occupational status as indicated by the socioeconomic index also exerts significant effects on educational attainment and, at least in the PSID, has lingering direct effects on occupational attainment. The same holds true for household income, which exerts stable direct effects on educational and occupational outcomes in both data sets. The correlations among different background components are stronger in the PSID data. Overall, these base models yield rather comparable conclusions about the relative force of different social background components and match up well with the classical results of status attainment research (Blau and Duncan 1967; Sewell and Hauser 1975).

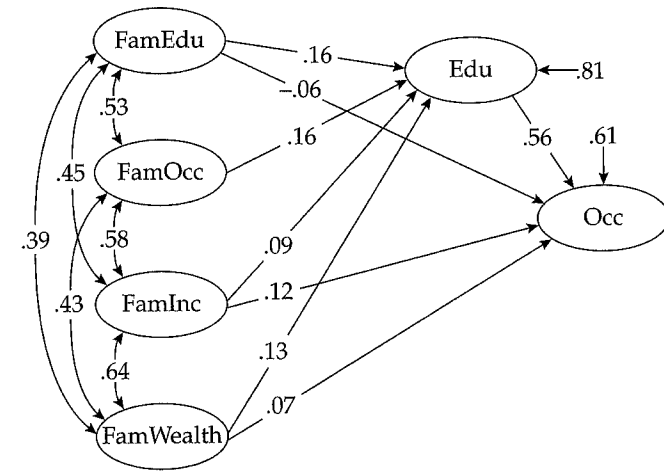
Of course, many other aspects of these models could be discussed here, but the focus of the analysis is on the question of how the overall structure of these models changes once wealth enters the picture. Figures 4.1(b) and 4.2(b) provide the answers, which can be summarized in the following way. First, the intergenerational effects of parental wealth are significant and strong. The size of the coefficients is in the broad range of that of other background effects (with the exception of the effects of parental education, which remain stronger in the PSID data).

Figure 4.1 Effect of Wealth on Standard Status Attainment Models: The United States (NLSY)

(a) Standard Model

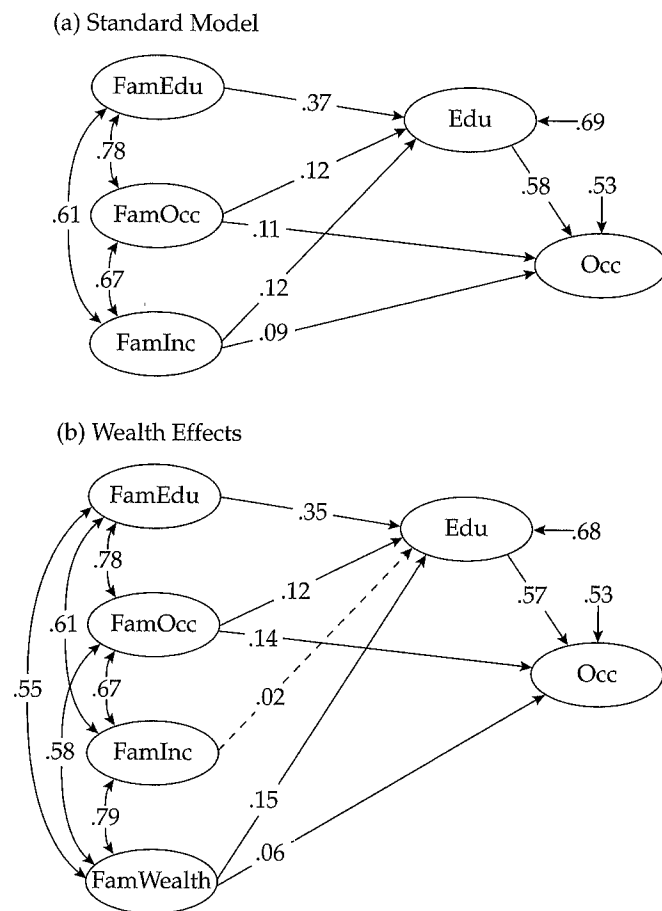


(b) Wealth Effects



Source: Author's calculations based on National Longitudinal Survey of Youth (Center for Human Resource Research 2008).

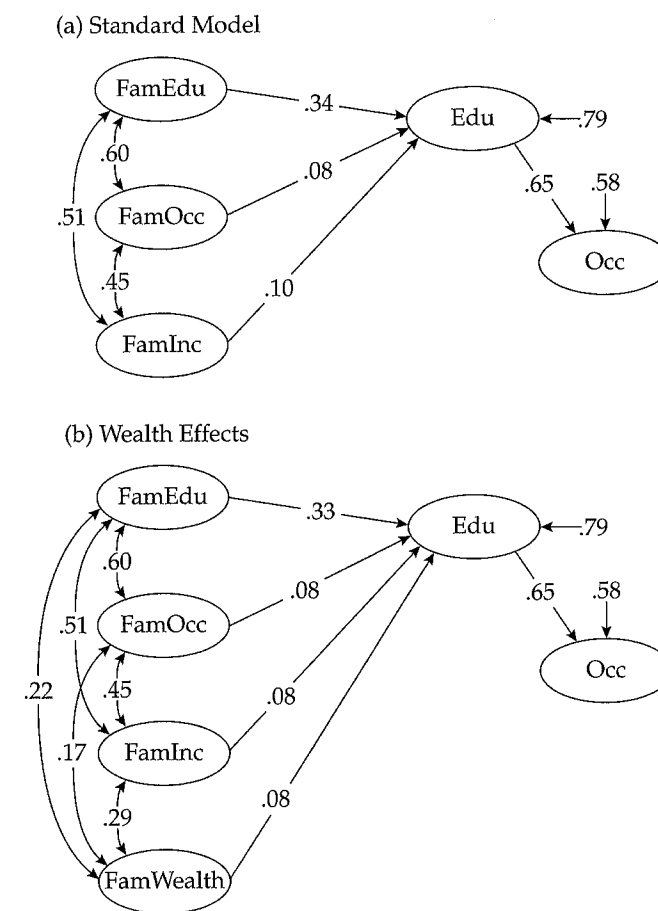
Second, the direct effect of parental wealth on occupational attainment, when we control for its association with educational attainment, is also significant and about half the size of its direct effects on education. Other background effects on occupational attainment differ between the two data sources, with parental occupation exerting positive effects in the PSID and family income exerting positive effects and parental education,

Figure 4.2 Effect of Wealth on Standard Status Attainment Models:
The United States (PSID)

Source: Author's calculations based on Panel Study of Income Dynamics (Brown and Schoeni 2007).

surprisingly, showing negative effects (when we control for all other independent variables) in the NLSY.

Third, by adding parental wealth to the classical status attainment model, the effects of family income are reduced—even to statistical and substantive nonsignificance in the case of the PSID. This suggests that in prior research at least a part of the family income measure has functioned as a rough proxy measure for intergenerational wealth effects. Based on the PSID results, we might even be tempted to conclude that all income

Figure 4.3 Effect of Wealth on Standard Status Attainment Models:
Germany (GSOEP)

Source: Author's calculations based on German Socio-Economic Panel (Wagner, Frick, and Schupp 2007).

effects are in fact wealth effects and subscribe to the claim, offered earlier, that wealth is just another and more reliable measure of permanent income. The NLSY results, however, suggest a more cautious conclusion. Here, I observe wealth effects while significant income effects remain. Possible explanations for this difference between the NLSY and PSID results are less likely to be found in different levels of measurement error, but may relate to differences in the age structure among parents in the two data sets.⁷

Overall, the suspected strong role of wealth in the intergenerational transmission of status is confirmed for the United States. Both educational and occupational outcomes are clearly associated with the value of parents' net worth when all the classical indicators of social background are held constant.

Wealth Effects in Germany

In the base model for Germany (figure 4.3), we again observe strong effects of parental education on educational attainment, which surpass the otherwise significant effects of parental occupation and family income. In contrast to the U.S. case, however, none of these background factors exerts direct effects beyond educational attainment on occupational destinations. In other words, the transmission of labor market advantage seems to be entirely mediated by educational attainment. This does not necessarily imply that the structure of intergenerational mobility would be in any way more "meritocratic" than in the United States. Instead, it means that higher-status parents succeed in passing along advantage to their children through higher levels of educational attainment. Beyond this, parents' socioeconomic resources do not—perhaps do not need to—contribute to status maintenance.

What changes when we add parental wealth to the picture? In figure 4.3(b), we observe a significant effect of parental wealth on educational attainment—incidentally of the very same size as the effects of parental occupational status and family income. Parental education remains the most crucial component of social background, and status reproduction still works through the transmission of educational advantage. This analysis is the first to provide empirical evidence for the relationship between wealth inequality and inequality in educational opportunity in Germany. Judging from the results, the role of parental wealth in intergenerational mobility merits at least as much attention as that of income and occupational background. Another reason why wealth inequality should be studied as an additional factor in intergenerational mobility in Germany is that, even more so than in the United States, it forms an independent dimension of social inequality that partly runs across existing lines of socioeconomic stratification, as indicated by the weaker correlation of wealth with other social background characteristics.

Cross-National Comparison

Finally, what have we learned about the relative centrality of parental wealth in the intergenerational transmission of status in these two countries? Comparing the sizes of the presented standardized regression coefficient within each data set, the most sensible conclusion is that of cross-national similarity in the relative importance of parental wealth as one ingredient

of intergenerational advantage.⁸ The effects of parental wealth on educational attainment are comparable in size to those of family income (in the NLSY and GSOEP) and family occupation (in all three data sets). They are significantly smaller than the effects of parental education, with the German intergenerational wealth effect, at about one-quarter of the parental education effect, in between the relative effect sizes estimated in the two U.S. data sets. The influence of wealth in status transmission extends beyond educational attainment in the United States, but not in Germany. This cross-national difference, however, is not peculiar to wealth effects. Instead, in Germany none of the included background characteristics show direct effects on occupational destinations once educational attainment has been taken into account.

Conclusions

The status attainment models presented here confirm that parental wealth exerts independent and strong effects on children's life chances in both the United States and Germany. Independently from classical measures of the socioeconomic standing of families—namely, parental education, occupation, and income—wealth emerges as an additional and reasonably powerful factor in the intergenerational transmission of advantage. Standard status attainment models, as they have been used over the last four decades, have therefore indeed neglected an important characteristic of parent households and partly failed to capture a central component of intergenerational status transmission. This shortcoming is not specific to the status attainment framework but rather characterizes a large part of mobility research. This chapter began by pointing out that gaining a better understanding of the channels of intergenerational mobility requires that mobility analyses incorporate the most relevant socioeconomic characteristics of parents. The results of this analysis suggest that wealth qualifies as one such characteristic.

One main contribution of this chapter is that, in revealing the similar role of parental wealth in educational attainment in the United States and Germany, it provides initial comparative evidence on intergenerational wealth effects. The size of wealth effects on children's educational opportunity is comparable in these two nations. Wealth effects on occupational attainment, controlling for the relationship between wealth and education, are observable only in the United States; in Germany these effects, like all other included background effects, are fully mediated by educational attainment.

How do these findings square with the theoretical expectations spelled out earlier? In offering three hypotheses on the causal processes that may underlie intergenerational wealth effects—in reference to neighborhood and school contexts, credit constraints, and social insurance—I argued

that each of these processes could be more pronounced in the United States than in Germany. I have also cautioned, however, that these causal interpretations of the associations studied here are challenged by the possibility of unobserved heterogeneity. This caution is based on more than just the standard econometric suspicion of unobserved bias. It derives from economic theory, which proposes several behavioral traits as correlates of parents' wealth position.

The problem of unobserved heterogeneity, unfortunately, not only bars us from inferring support for the hypothesized causal mechanisms from the results presented here but also precludes the possibility of devising a final prediction and explanation of the cross-national differences and similarities in the intensity of intergenerational wealth effects. Are these unobserved characteristics of parents the main or even the only explanation for wealth effects on children's life chances, rendering the other suggested causal pathways negligible? At this point, the similarity of wealth effects across these two nations cannot rule out that possibility. Or does the relative importance of these unobserved characteristics differ by country? What if the wealthy and nonwealthy are distinguished by one set of characteristics in a nation of homeowners, like the United States (see Kurz and Blossfeld 2004), and by a different set of characteristics in a nation of savers, like Germany (Börsch-Supan et al. 2001)? Conceivably, the effects of unobserved behavioral differences might even run in different directions in these countries, offering a possible counterweight to the differences expected based on the causal mechanisms suggested earlier.

In short, the cross-national comparison presented here reveals the symptomatic challenge in identifying institutional influences on intergenerational mobility processes without observing the causal microlevel mechanisms underlying these processes. Comparative research that seeks to pin down the influence of institutional and macro-social structures is plagued by well-known structural difficulties (see Lieberman 1991), but the requirement that we obtain an empirical understanding of the causal pathways through which status is reproduced over generations in each nation is an especially thorny one.

The results of this analysis do establish that parental wealth plays a central role in the reproduction of inequality, a finding that future mobility research cannot afford to ignore. The analysis cannot, however, substantiate the claim that the institutional setup of education and social security systems may alter this role. To do so, the mechanisms that have been hypothesized to drive the observed effects must be subjected to empirical testing, a task that I attend to in a different part of my research.⁹ Here I map out the necessary next steps that would lay the foundation for further illuminating the black box of intergenerational wealth effects. Although I hope that the status attainment models provided an accessible first overview of intergenerational wealth effects, these models entail the strong assumption of linear background effects on different status destinations.

Two important extensions of these models are necessary: the years of education measure that has fallen into disgrace with most sociologists will have to give way to the more meaningful measure of educational degrees, and not just for technical reasons. The theoretical hypotheses developed in this chapter apply to different stages of the educational attainment process. That is, neighborhood and school contexts may influence secondary attainment, while credit constraints should chiefly be at work at the postsecondary level. Similarly, the effects of parental wealth on occupational attainment might become more easily interpretable once we investigate how wealth is associated with different occupational class positions. The category of self-employment is but the most obvious case for which parental wealth may take on particularly important functions (see Evans and Jovanovic 1989; Fairlie and Robb 2008).

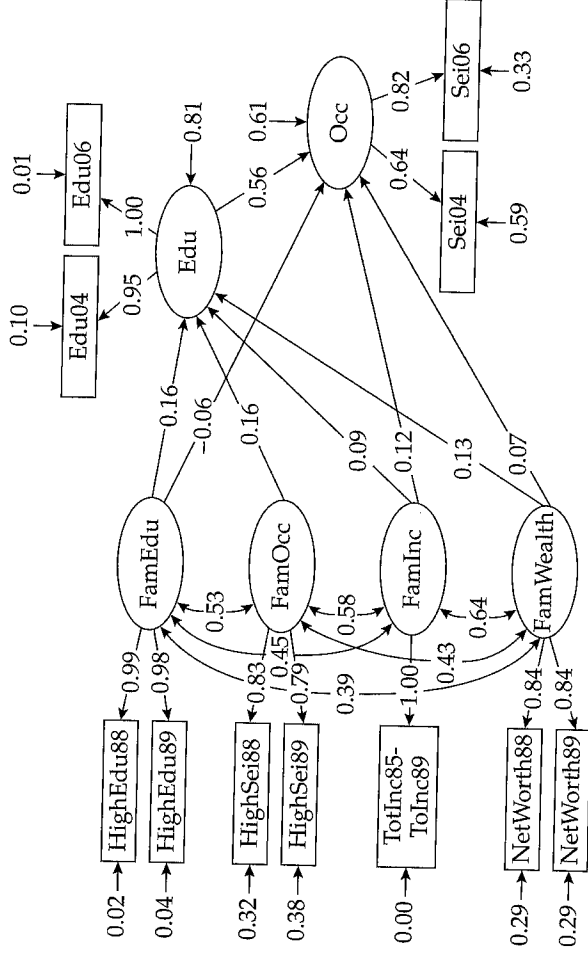
A second necessary departure from the linear world of status attainment research is to try to identify heterogeneity in the effects of wealth across its distribution. The observed wealth effects might, for instance, be concentrated at the extremes of the wealth distribution. The lack of wealth especially has come to be understood as a position of particular disadvantage (Sherraden 1991; Haveman and Wolff 2005; Brandolini, Magri, and Smeeding 2010). The latter work also sparked much interest in asset-building policies among both academics and policymakers (see, for instance, Shapiro and Wolff 2001), which should remind us of the need to confront the thorny issues of causality before any policy-relevant conclusions—be it in favor of asset-building strategies or broader institutional reforms—can be formulated.

Finally, the comparative scope of this analysis may be expanded in the future. National panel studies from other countries that track the children of panel households either have been initiated much later than the panel studies used here or have begun collecting wealth data in later waves. With the necessary patience, however, researchers will be able to analyze the association between parental wealth and the educational and early occupational success of the panels' second generation in the United Kingdom (British Household Panel Study [BHPS], first collection of wealth data in 1995); Australia (Household Income and Labour Dynamics in Australia [HILDA], wealth data starting in 2002); and Switzerland (Swiss Household Panel [SHP], wealth data starting in 2009). In addition, by drawing on registry data, such an analysis may also include some Scandinavian countries (see Pfeffer and Hällsten 2011).

This research has been supported by a dissertation grant from the Institute for Research on Poverty at the University of Wisconsin–Madison as well as by grants from the Spencer Foundation and the German National Academic Foundation. The author thanks Robert M. Hauser, Erik O. Wright, and Markus Gangl, as well as the editors and reviewers, for helpful comments.

Appendix

Figure 4A.1 Full Status Attainment Model: NLSY



Fit statistics ($N = 2,497$): $\chi^2 = 50.17$, $df = 27$, $p = .00435$, RMSEA = .019, BIC = -161.0.

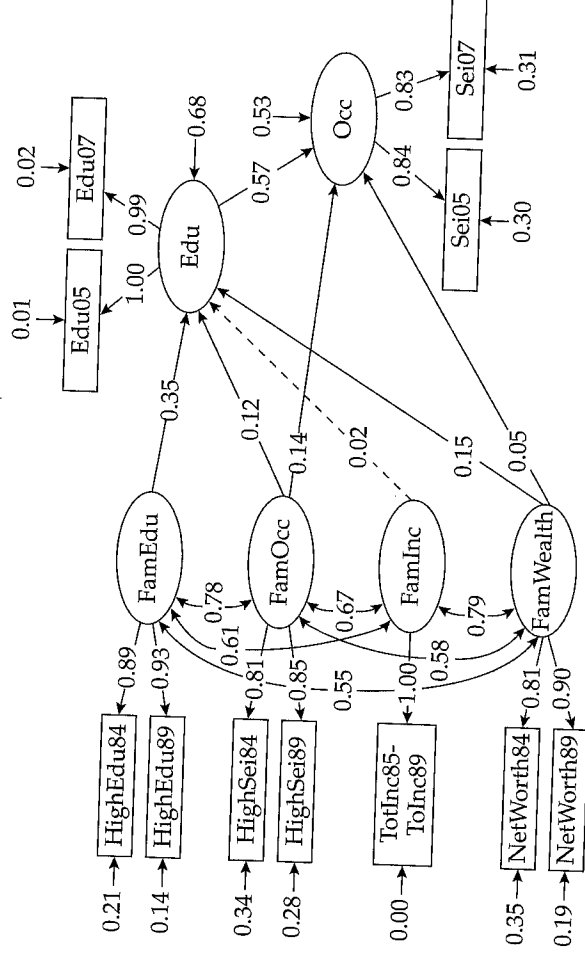
Correlations in measurement errors: HighSei89-NetWorth89, HighSei88-NetWorth88, HighSei88-TotInc, Edu04-Sei044.

Correlation Table

| | Edu04 | Edu06 | Sei04 | Sei06 | Edu88 | Edu89 | Sei88 | Sei89 | LincadJln | Wealth88 | Wealth89 |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-----------|----------|----------|
| Edu04 | 1.000 | | | | | | | | | | |
| Edu06 | 0.946 | 1.000 | | | | | | | | | |
| Sei04 | 0.407 | 0.385 | 1.000 | | | | | | | | |
| Sei06 | 0.484 | 0.506 | 0.546 | 1.000 | | | | | | | |
| Edu88 | 0.315 | 0.332 | 0.109 | 0.185 | 1.000 | | | | | | |
| Edu89 | 0.315 | 0.329 | 0.108 | 0.176 | 0.970 | 1.000 | | | | | |
| Sei88 | 0.284 | 0.305 | 0.161 | 0.226 | 0.423 | 0.420 | 1.000 | | | | |
| Sei89 | 0.254 | 0.267 | 0.126 | 0.207 | 0.413 | 0.414 | 0.643 | 1.000 | | | |
| LincadJln | 0.325 | 0.335 | 0.219 | 0.256 | 0.445 | 0.443 | 0.429 | 0.453 | 1.000 | | |
| Wealth88 | 0.305 | 0.310 | 0.172 | 0.224 | 0.365 | 0.356 | 0.318 | 0.320 | 0.567 | 1.000 | |
| Wealth89 | 0.288 | 0.302 | 0.186 | 0.223 | 0.353 | 0.349 | 0.330 | 0.344 | 0.597 | 0.806 | 1.000 |

Source: Author's calculations based on National Longitudinal Survey of Youth (Center for Human Resource Research 2008).

Figure 4A.2 Full Status Attainment Model: PSID



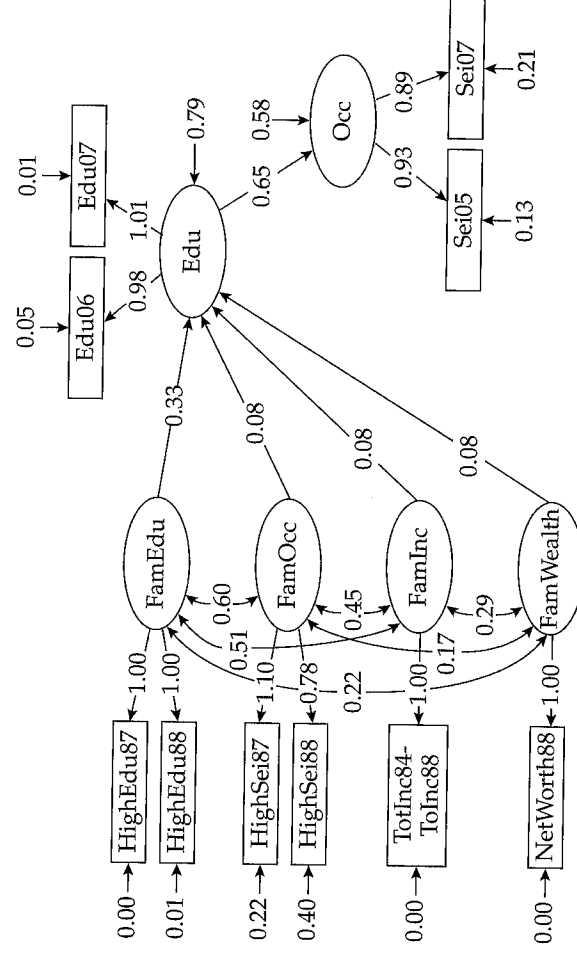
Fit statistics ($N = 1,665$): $\chi^2 = 50.64$, $df = 28$, $p = .00584$, $RMSEA = .022$, $BIC = -157.1$.
Correlations in measurement errors: HighEdu84-HighSei84, HighEdu84-Wealth84, Wealth84-HighSei84, Edu07-Occ07.

Correlation Table

| | Edu05 | Edu07 | Sei05 | Sei07 | Edu84 | Edu89 | Sei84 | Sei89 | Ltincadjln | Wealth84 | Wealth89 |
|------------|-------|-------|-------|-------|-------|-------|-------|-------|------------|----------|----------|
| Edu05 | 1.000 | | | | | | | | | | |
| Edu07 | 0.988 | 1.000 | | | | | | | | | |
| Sei05 | 0.550 | 0.546 | 1.000 | | | | | | | | |
| Sei07 | 0.562 | 0.568 | 0.696 | 1.000 | | | | | | | |
| Edu84 | 0.483 | 0.481 | 0.373 | 0.339 | 1.000 | | | | | | |
| Edu89 | 0.494 | 0.490 | 0.359 | 0.342 | 0.826 | 1.000 | | | | | |
| Sei84 | 0.410 | 0.409 | 0.328 | 0.319 | 0.629 | 0.597 | 1.000 | | | | |
| Sei89 | 0.399 | 0.403 | 0.312 | 0.302 | 0.579 | 0.604 | 0.690 | 1.000 | | | |
| Ltincadjln | 0.423 | 0.421 | 0.343 | 0.333 | 0.538 | 0.564 | 0.551 | 0.569 | 1.000 | | |
| Wealth84 | 0.360 | 0.361 | 0.284 | 0.245 | 0.446 | 0.416 | 0.445 | 0.418 | 0.632 | 1.000 | |
| Wealth89 | 0.372 | 0.376 | 0.311 | 0.270 | 0.451 | 0.453 | 0.426 | 0.442 | 0.708 | 0.726 | 1.000 |

Source: Author's calculations based on Panel Study of Income Dynamics (Brown and Schoeni 2007).

Figure 4A.3 Full Status Attainment Model: GSOEP



Fit statistics ($N = 745$): $\chi^2 = 33.36$, $df = 24$, $p = .09679$, RMSEA = .023, BIC = -125.4.
Correlations in measurement errors: HighEdu88-HighSei88, HighSei88-TotInc, Edu06-Occ06.

Correlation Table

| | Edu06 | Edu07 | Sei06 | Sei07 | Edu87 | Edu88 | Sei87 | Sei88 | Ltinc | Wealth88 |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
| Edu06 | 1.000 | | | | | | | | | |
| Edu07 | 0.984 | 1.000 | | | | | | | | |
| Sei06 | 0.605 | 0.613 | 1.000 | | | | | | | |
| Sei07 | 0.560 | 0.582 | 0.830 | 1.000 | | | | | | |
| Edu87 | 0.426 | 0.441 | 0.292 | 0.284 | 1.000 | | | | | |
| Edu88 | 0.425 | 0.441 | 0.289 | 0.280 | 0.994 | 1.000 | | | | |
| Sei87 | 0.376 | 0.376 | 0.219 | 0.231 | 0.664 | 0.660 | 1.000 | | | |
| Sei88 | 0.268 | 0.268 | 0.159 | 0.158 | 0.468 | 0.472 | 0.857 | 1.000 | | |
| Ltinc | 0.309 | 0.315 | 0.193 | 0.181 | 0.505 | 0.506 | 0.493 | 0.308 | 1.000 | |
| Wealth88 | 0.209 | 0.202 | 0.165 | 0.159 | 0.221 | 0.215 | 0.188 | 0.134 | 0.288 | 1.000 |

Source: Author's calculations based on German Socio-Economic Panel (Wagner, Frick, and Schupp 2007).

Notes

1. Russell Rumberger (1983) has estimated status attainment models that include a net worth measure, but unfortunately they excluded other important socioeconomic background characteristics, such as parental education and income. Although he did find significant and strong effects of net worth on both years of schooling and earnings attained, it is unclear whether those effects might partly arise from the exclusion of these other background indicators.
2. Florencia Torche and Seymour Spilerman (2006, 2009) demonstrate that parental wealth plays an important role in two late-industrializing countries. In both Mexico and Chile, they find strong effects of parents' asset ownership on different indicators of offspring's economic well-being. Spilerman (2004) also finds independent effects of a rudimentary proxy measure of parental wealth on educational attainment as well as a range of economic well-being measures among young Israelis.
3. I find this line of reasoning largely unconvincing because (a) given the fact that a large part of families' wealth is determined by bequests and intergenerational transfers, if anything, risk aversion would more likely be a mediator than a preceding confounder of the relationship between wealth and children's outcomes; and (b) risk aversion holds no promise for explaining the positive relationship between wealth and opportunities if we assume risk-averse families to be more likely to accumulate wealth while expecting risk-averse children to be less willing to invest in long educational and occupational careers (see Belzil and Leonardi 2009).
4. Adjusting income measures for household size is a widely shared practice for income measures (Canberra Expert Group 2001), but no such consensus has emerged yet for wealth variables (see Sierminska and Smeeding 2005). The decision whether to adjust wealth measures for household size mainly depends on the specific wealth component we study: some asset types can be considered more easily divisible, such as savings, while others retain their value largely independent of the number of children drawing from them, such as housing wealth. Since housing wealth makes up the largest part of the typical family's asset portfolio, I have decided against the household size adjustment of the net worth measure. It can also be noted, however, that further analyses (not shown here) that include a control for household size leave the net worth coefficient substantively unaltered.
5. For the social background variables, these are the years 1988+1989 (NLSY), 1984+1989 (PSID), and 1987+1988 (GSOEP); for children's outcomes, the years are 2004+2006 (NLSY), 2005+2007 (PSID), and 2006+2007 (GSOEP).
6. For instance, measurement error in the GSOEP wealth measure would have to be five to seven times the estimated U.S. level to make the intergenerational wealth effects in Germany disappear (detailed results available from the author).
7. There is no obvious reason why the wealth measure in the PSID should be more reliable than the NLSY wealth measure—certainly, neither the technical

literature (see Engelhardt 1998; Juster, Smith, and Stafford 1999) nor the measurement model of this analysis gives any such indication. Again, a sensitivity analysis that imposes equal levels of measurement error for both data sets yields the same results. Although there is also no apparent reason why the five-year income average in the PSID data should be a more error-prone indicator of permanent income than in the NLSY, I have replicated the PSID analyses with a ten-year average income measure, and the results also remain unchanged.

Instead, an important difference between the NLSY and PSID samples used here is the younger age of the NLSY mothers (despite looking at NLSY sample members as parent households a decade after the panel started). The NLSY families are therefore on average less wealthy than the PSID families, and their wealth and income are still less correlated (see appendix).

8. A more audacious interpretation, which I myself am not willing to follow, would assume the complete cross-national standardization of all measures included here and directly compare coefficient sizes across data sets. It can be noted, however, that even if one engaged in this comparison, it would hardly be evident that these two countries differed *radically* in the importance of wealth for educational attainment.
9. There is not sufficient space here to summarize the details of this project (see Pfeffer 2010), but I may nevertheless point the reader toward some of its results. Drawing on different empirical approaches that test for the presence of unobservable bias, I am able to lend more credence to the causal relationship between parental wealth and educational outcomes. Both the ensuing empirical assessment of the mediating mechanisms and, at closer sight, the cross-national comparison suggest an important and more fundamental insurance function of wealth in both nations, a function that is not replaced by existing educational policies and welfare state arrangements (see also Pfeffer and Hällsten 2011).

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