Data Appendix to "Mass Secondary Schooling and the State: The Role of State Compulsion in the High School Movement" Claudia Goldin and Lawrence F. Katz

Construction of State-Level Compulsory Education and Child Labor Laws, 1910 to 1939

The compilation of state-level compulsory education and child labor laws (see the stlawscg.dta file), from 1910 to 1939, contains the following seven variables:

- 1. Minimum age of compulsory schooling, know as the school entrance age (also compiled for 1900 to 1909; see statelaws add.raw file);
- 2. Maximum age of compulsory schooling (also compiled for 1900 to 1909; see statelaws add.raw file);
- 3. Education for exemption from maximum age rule;
- 4. Age at which youth can obtain a work permit (for work during normal school hours);
- 5. Education required to receive a work permit (for work during normal school hours);
- 6. Whether state has mandatory continuation schools; and
- 7. Maximum age of continuation school attendance (state permits municipalities to establish continuation schools).

These are summary variables of complex laws. The first 3 variables concern compulsory education laws and the last 4 are child labor laws. Compulsory education and child labor laws were often two sides of the same coin. They have appeared to latter-day observers to have been inconsistent because the maximum age of compulsory education was often higher than the age at which a work permit could be obtained. But the laws were generally part of the same piece of legislation and had a set of similar goals.

The binding constraint for much of the period we consider was the age at which a youth could obtain a work permit or the education required to receive a work permit. Take, for example, a state with a maximum age of compulsory education of 16 years, but in which a youth of 14 can receive a work permit for work during normal school hours if the youth had already completed 8 years of school. In that case, the binding constraint would be, most likely, the age needed for the work permit. But if the education required were no more than being able to "read and write," the binding constraint would be the education required to get a work permit. Many states also had a minimum education level to excuse a youth from the maximum age of compulsory education. In certain states and at certain times, this would have been the binding constraint.

Finally, many states adopted laws requiring school districts to establish "continuation schools." The continuation school idea caught on after World War I, although it was first adopted in 1911 by Wisconsin. A mandatory state continuation school law (variable 6) meant

that school districts, with a large enough number of working youths under some age, had to establish a continuation school. Youths who did not meet a minimum education standard were required to attend the school for some number of hours per week (for example, one afternoon of four hours) and the employers were often responsible to excuse the youths from work during their school time. Many states, however, did not have a mandatory law but, rather, had a law setting the maximum age for youths to be in such a school if one existed. That is, variable (6) would be 0 but variable (7) would be some age. If a municipality had a continuation school, the maximum age given in the state law would be binding.

The compulsory education and child labor laws contain numerous complexities that make their coding difficult. Most states, for example, had several exemptions for compulsory education and a detailed knowledge of court decisions is required to assess their importance. For example, "mental defectives" were almost always exempt from compulsory education laws. Similarly, children of impoverished families were often exempt from the education requirement for a work permit. The definition of "defective" and "impoverished" was up to the courts. There is also the difficult issue of enforcement.

Another complexity is that state laws occasionally had different ages for cities and towns than for the rest of the state or for the largest city versus all other places. Our coding used that for the majority of the population. In other cases, the state left the details of compulsory education laws to the school districts and municipalities. Finally, these seven variables omit the details concerning child labor laws, such as the number of hours they could labor and the occupations that were banned for youths of various ages and by sex.

The data on these laws are primarily derived from 12 contemporaneous compilations (see References) most often commissioned by the U.S. Office of Education or the Children's Bureau of the U.S. Department of Labor. When a law changed between two of the compilations, the actual state laws were consulted to find the precise date of change or, when available, information on changes to state laws published by the Office of Education. In some cases we could not locate the precise date of change. In such cases, the law is generally extrapolated back in time (e.g., if a law changes between 1921 and 1924, the 1924 details are assigned to 1922 and 1923). Because we have major compilations for 1910, 1914, 1915, 1917/18, 1921, 1924, 1927, 1928, 1929, 1935, 1939, and 1945, as well as minor compilations for several other dates, the change dates that we have imputed are probably not too different from the actual ones.

The interpretation of the state laws was often difficult and some compilations were clearly wrong in some of the details. In certain cases, the state laws are difficult to code because they did not apply in uniform ways throughout the state. For example, in some cases the law applied to just the largest city (e.g., Wilmington DE, New Orleans LA, Baltimore MD). In these cases, we have coded the state law rather than that of the city because the majority of the state's population did not live in the largest city. But when the law applied to all cities and town (say above 2,500 population) we have coded the city laws rather than those applying to only rural areas in the state. In some cases, there was no state law and localities were given discretion to write their own law. In these cases, we coded the state as not having a law. In a few instances the law applied differently to boys than to girls and we have used the restrictions that applied to the former.

The data set is the result of many individual labors. It was begun independently by Claudia Goldin (in 1993) and by Adriana Lleras-Muney (in her Ph.D. dissertation). Stefanie Schmidt took Goldin's initial coding and added others. Stefanie Schmidt's work covered almost the same years that Lleras-Muney's did (1915 to 1935 for Schmidt and 1915 to 1939 for Lleras-Muney). Both used similar sources in most years, but there were some differences. Schmidt relied on state legal documents for the years between the compilations to pinpoint state law changes. Lleras-Muney used more published compilations than did Schmidt and thus encountered fewer changes that had uncertain dates.

We cross-checked these two compilations (and another by Angrist and Acemoglu, which also covers years after 1940 but contains less detail for the 1915 to 1940 period), checked them against the original documents used, and rectified the differences, as best we could. In addition we extended the Lleras-Muney and Schmidt series back to 1910.

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§ denotes one of the major compilations of compulsory education and/or child labor laws.