

**Protection through Proof of Age.  
Birth Registration and Child Labor in Early 20<sup>th</sup> Century USA.**

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**Abstract**

A birth certificate establishes a child's legal identity and is the sole official proof of age. However, there are few quantitative estimates of the economic significance of birth registration. Birth registration is taken for granted in today's developed countries, but in many developing countries, the births of a significant share of children are not registered. This study examines the significance of birth registration for child labor from a historical perspective. Birth registration laws were enacted by U.S. states in the 19<sup>th</sup> and early 20<sup>th</sup> centuries. The variation in the timing is used to identify how birth registration changed the effectiveness of child labor legislation between 1910 and 1930. If a registration law had been enacted by the time a child was born, the effectiveness of minimum working age legislation in prohibiting under-aged employment doubled. This effect is stronger for children in non-agricultural counties.

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## 1 Introduction

For any law with an age requirement to fulfill its purpose, credible formal proof of age is required. Whether this exists, depends on whether the birth of the individual was officially registered, and whether a certificate exists, or can be requested from an official file.

According to Article 7 of the United Nations Convention on the Rights of the Child (1989)<sup>1</sup> “A child shall be registered immediately after birth...”. In most developed countries today, the registration of births is taken for granted. However, in many developing countries, the births of a significant proportion of children go unregistered.<sup>2</sup> A birth certificate establishes a person's legal identity and functions as official proof of age (see e.g. Todres, 2003). According to a report by UNICEF (2005), without a birth certificate, children are unlikely to hold formal proof of age, and cannot necessarily be considered legally under-aged for certain activities, such as marriage, work, or prosecution. In several countries, access to health care and education can be denied without a birth certificate. The registration of births and other vital events generates accurate figures on the population and is therefore also considered important for the planning of economic and social policies.

Despite the potential significance of birth registration from an economic and welfare perspective, the study of birth registration has not attracted much attention from economists. A few historians have discussed the significance of birth registration for economic development (see e.g. Szreter, 2007 and Higgs, 1996).<sup>3</sup> There is general acknowledgment of the importance of identity documentation for instance for access to formal finance in developing countries (see e.g. Demirgüç-Kunt et al., 2008) and some reports on the consequences of lack of registration do exist (see e.g. ADB, 2007 and Harbitz and Boekle-Giuffrida, 2009). However, there is a lack of causal statistical evidence on the economic significance of birth registration. To the author's knowledge, quantitative estimates on the extent to which the lack of a birth certificate constrains the economic and social opportunities of an individual, denies individuals of their legal rights, or how the lack of birth registration might inhibit social and economic planning at a national level, hardly exist.

In order to understand more about the potential economic significance of birth registration, this study takes a historical approach. It focuses on the USA in the early 20<sup>th</sup> century, when state-level laws and institutions for birth registration were established across U.S. states. The timing of the enactment of state birth registration laws varied across states. Whether a child had an official birth certificate depended

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1 <http://www2.ohchr.org/english/law/crc.htm> (last accessed 12 July 2011).

2 According to estimates for 2005/2006, the share of children under the age of five, whose births were registered, was as low as 7% in Ethiopia, 41% in India, 70% in Cameroon in 2006 and 88% in Vietnam in 2006. Source: UNICEF, based on the Demographic and Health Surveys (DHS) or the Multiple Indicator Cluster Surveys (MICS) [http://www.childinfo.org/birth\\_registration\\_tables.php](http://www.childinfo.org/birth_registration_tables.php) (last accessed 12 July 2011).

3 Szreter (2007) discusses the potential economic importance of parish registers in England between the 16<sup>th</sup> and 18<sup>th</sup> centuries. He explains how these registers provided proof of identity for the purposes of verifying property and inheritance rights as well as social security claims (the Poor Laws), which he argues were important for the mobility of labor and capital, and thus significant for economic development. Higgs (1996) describes how the need to clarify property rights lies behind the establishment of civil registration systems in Britain.

on whether there were mandatory state-level registration laws and state-level procedures for registration and filing of records at the time of birth. At this point in time, if births were registered, this generally happened early in the child's life, as procedures for delayed registration were missing, or complex.

Child labor in the USA declined significantly in the early 20th century. The question addressed in this study is whether minimum working age legislation is more effective in combating under-aged employment when birth certificates are available as proof of age. This question is still relevant for today's developing world, where according to UNICEF estimates for 2010, one in six children aged between 5-14 are engaged in child labor<sup>4</sup>. At a more general level, this is a study on the importance of birth registration as an institution for the enforcement of a law that specifies a minimum age.

The role played by child labor laws in either educational attainment, or the incidence of child labor in the U.S. has been studied by economists (see e.g. Osterman, 1979, Brown et al., 1992, Margo and Finegan, 1996, Moehling, 1999, Lleras-Muney, 2001, Manacorda, 2006, Goldin and Katz, 2008). More recent econometric studies find that the laws were relevant for raising education levels, or reducing child employment, but that their contribution was not necessarily large. However, economic literature on child labor has so far not explicitly recognized the role of birth registration in the enforcement of minimum age legislation.<sup>5</sup>

Birth registration did feature in policy discussion on child labor in early 20th century USA and concern was expressed towards the practice of accepting a parent's testimonial as proof of age when granting work permits. Registration practices improved significantly with the enactment of state birth registration laws, and birth certificates could gradually be relied upon as official proof of age.

This study utilizes individual-level data from 1 percent samples of three U.S. censuses; for 1910, 1920 and 1930. The analysis focuses on the significance of birth registration laws for the enforcement of child labor laws, namely the laws on minimum working age, which varied across states and time. Whether a child was born with a registration law in place depended on his, or her year of birth and state of birth. The age group studied is 12-15 year olds.

The results show that minimum working age legislation reduced the tendency of under-aged children to work. However, the law was significantly more effective when children had been born during, or after the year, when their state of birth had enacted a birth registration law. On average between 1910 and 1930, under-aged children born with a registration law were around 9 percentage points less likely to work than work-eligible children. However, under-aged children born before a registration law, were only around 4 percentage points less likely to work than the work-eligible. In general, birth registration doubled the effectiveness of minimum working age legislation in prohibiting under-aged employment.

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<sup>4</sup> See <http://www.childinfo.org/labour.html> (last accessed 12 July 2011).

<sup>5</sup> In this connection it should be noted that the author is aware of an unpublished study by Puerta (2010) on the effects of child labor laws on the value added in the U.S. manufacturing sector where a robustness check takes into account whether the child labor law required documentary proof of age. This is not the focus of the study, but whether industries that were more dependent on child labor grew more slowly with child labor laws.