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ABSTRACT: Between 1915 and 1920, 18 U.S. states considered the introduction of compulsory health insurance. Given the alleged deficiencies of voluntary arrangements for insuring sickness, reformers expected social insurance to be welfare enhancing for American wage-workers since it would result in lower cost insurance and an extension of coverage to more of the population. Scholars commonly ascribe the inability of states to introduce government health insurance to American ideology and institutions that prevented the political mobilization of wage-workers. They view the lack of government insurance as a policy failure and significant for explaining why the U.S. does not have national health insurance today. The evidence presented in this paper casts doubt on this interpretation. Compulsory insurance would not have provided gains for wage-workers, and this explains the absence of broad political support for health insurance legislation in this early period.

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Between 1883 and 1920, many European countries introduced government health insurance through social insurance arrangements, or a state-promoted expansion of existing voluntary mutual aid arrangements. Progressive reformers in the U.S. interpreted state provided health insurance as the necessary and inevitable response to the moral and economic inadequacies of voluntary insurance and self-help arrangements in protecting households against the consequences of sickness. Given the developments in Europe and the introduction of Worker’s Compensation in many states before World War I, the reformers believed that government health insurance was the next step in social progress for the U.S. At the impetus of the American Association for Labor Legislation (AALL), between 1915 and 1920, as many as 18 U.S. states investigated but rejected compulsory-state health insurance (CHI). The AALL reformers and many scholars today consider this outcome to be a policy failure and significant for explaining why the U.S. does not have, and is unlikely to have in future, national health insurance.

If CHI was efficiency enhancing and stood to have made some or all wage-workers better off as the AALL reformers argued, then why were legislators and political “brokers” unable to evoke the necessary political action for its introduction? Anderson (1968, 87) argues that the indifference of Americans towards compulsory health insurance in this early period left organized groups, such as doctors and life insurers, with

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2 Rubinow (1931) argued that health insurance was the “next step in social progress” in 1916 but by 1930, “that particular step has not been taken.”
3 Lubove (1968, 2-3) argued that Americans continued to rely on voluntary institutions that failed to respond to their security needs and that undermined government efforts to meet those needs. Fox (1983, 599) argues that many scholars have viewed the failure of the United States to enact a national health insurance program as symbolic of the nation’s incomplete social evolution. Also, see Quadagno (2005).
4 Hoffman (2001), Quadagno (2005). Since these early European social insurance programs paved the way for the expansion of the welfare state, the rejection of this early form of health insurance in the U.S. may be a reason that the US does not have a European style welfare state today (Costa 1995).
political clout and vested interests in the defeat of CHI to determine the outcome. Social reformers such as the members of the AALL interpreted public indifference to CHI as evidence that wage-workers were either ignorant of their true needs for economic security, and/or ideologically driven to reject social insurance as “un-American” despite their dire needs for the programs. In contrast, the “moneyed interests” in the U.S. (as AALL reformers named them) such as business organizations, employers associations and insurance companies argued that CHI was unnecessary due to the superior earning power of American wage-workers relative to their European counterparts. Americans had a greater capacity to save and to purchase insurance coverage through voluntary arrangements.

Fox (1983) suggests that most scholars who have studied the failure of the United States to enact CHI have accepted the reformers claims uncritically. Consequently, the literature about the alleged failure of this early CHI movement emphasizes “supply side” explanations for the adoption of government programs; taking the existence of need or demand for the program as given, the adoption/non-adoption reflects the capability of government to implement the social insurance. To explain “American failure” on the social policy front, Rodgers (1998, 255) describes social-policy historians as engaged in a search for “structures and materials distinctive to the United States”. Guided by the observation that the U.S. would appear to be the only western (developed) nation without national health insurance today, this search for exceptional characteristics inevitably settles on explanations emphasizing unique American ideology, and/or institutional

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5 The need for state provided health insurance was taken for granted by proponents of compulsory health insurance before 1920 (Anderson 1950, 366). Rubinow (1913a, 28) stated that the need for social insurance in the US was self-evident. A notable exception is Peter Lindert’s (1994, 1996 and 2004) work.
structures, and/or interest group powers. The argument follows that since these exceptional conditions that discouraged the adoption of government health insurance are slow to change, the reasons for the rejection of CHI in this early period can explain the absence of national health insurance today.

Rodgers (1998) denies the existence of a “special `American idea’ which is inhibitive to the adoption of social insurance.” While the U.S. did not adopt CHI, Americans did introduce Worker’s Compensation before 1920 and public old age insurance in the 1930s (Beland and Hacker 2004). As worker’s compensation programs in the U.S. demonstrated, observes Lubove (1968, 24), social insurance could be adapted to voluntary values and institutions. Moss (1996, 176) argues that in the United States, “The progressive concept of security – widely attacked as socialistic and un-American during the progressive era – has developed into one of the bulwarks of American public policy.”

If the rejection of CHI by Americans in this early period can be understood in terms of issues specific to CHI, or this early period, rather than general to American conceptions of the role of the state then the failure of the AALL CHI movement is not part of a path dependent process. As Moss (1996, 176) suggests, changing economic conditions in the United States could lead Americans to reassess American social welfare institutions, including whether they would benefit from having national health insurance.

For government action on CHI to have been politically profitable for legislators

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6 Beland and Hacker (2004) suggest that most explanations for “American Exceptionalism” can be classified as societal theories that focus on factors that are considered independent of political institutions such as economic conditions, cultural values, class conflict and interest group power, or historical institutional explanations that focus on the distinct development and structure of U.S. political institutions.

7 For example, Lindert (1994, 28) suggests that the peculiar distaste that Americans have for government aid is durable. Quadagno (2005) argues that powerful interests (Doctors and Insurance companies) have always prevented Congress from passing the national health insurance legislation.

8 According to Moss (2002, 153), Americans spend more on social insurance than on any other type of government program, including defence.
and political brokers, significant failures in private markets must have existed for CHI to be a wealth enhancing institutional alternative to the market. To assess this condition for the political viability of CHI in the U.S., I investigate what CHI legislation, as drafted by the AALL, would have done for American workers compared to their voluntary-insurance options. I quantify the frequency and duration of work-related disability and I use these estimates to value the expected insurance costs and benefits of the proposed AALL CHI legislation and available voluntary arrangements. The analysis provides empirical support for Costa’s (1995) suggestion that CHI was, at best, an expensive duplication of insurance available through voluntary avenues.

Even though CHI was expensive, it could still have been welfare enhancing for wage-workers if households lacked the necessary surplus in their budgets to purchase the voluntary-insurance contracts. My estimates of household budget surpluses from data from the 1888–90 U.S. Commissioner of Labor Cost of Living study and the 1917–19 BLS Cost-of-Living Survey show that, contrary to the claims and evidence of the AALL reformers, American wage-workers could insure against sickness without CHI. Further, the capacity to self-insure, or purchase insurance coverage, increased over the life-cycle, and for wage-workers under age 40, it increased between the late nineteenth century and 1920. With these estimated surpluses, I am also able to show why the AALL CHI movement was strongest in New York and why the move to social insurance would have been earliest in Germany. The lack of demand for CHI on the part of American wage-workers means that the rejection of CHI before 1930 should not be considered a policy failure, nor should it be interpreted as significant for explaining the lack of government health insurance in the United States today.
1. The Historical Background for Compulsory State Health Insurance in the U.S.

During the nineteenth and early-twentieth century, lost income due to illness was one of the greatest risks to a wage earner’s household’s standard of living in North America and Europe. Before 1920, lost income was the important cost of illness for workers and, consequently, sickness/health insurance in this earlier era was for income stabilization, which was thought to be useful for the prevention of poverty. Prior to the introduction of state health insurance programs in Europe, similar “patchworks of protection” — issuing from mutual aid organizations, trade unions, commercial insurers, discretionary charity and self-reliance through thrift — were available to workers on both sides of the Atlantic. Proponents of state-social insurance and most

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10 The costs of sickness and poor health include lost income, direct medical costs of hospitalization, physician care and medicine, and for society, lost productivity. By the late 1920s, costs associated with medical treatment and hospitalization equaled the size of income loss (Davis 1934) and were the larger cost by the 1940s due to technical change in medical treatment, the organization of care around hospitals and the growing strength of Medical Associations in North America (Starr 1982, Thomasson 2002). Armstrong (1932, 334) reports that in 1915, for government health insurance arrangements the proportion of health insurance benefits paid in cash versus “in kind” ranged from 42 percent to 98 percent. By the late 1920s, these proportions ranged from 16 percent to 56 percent. Later health insurance movements in the United States, and centralization of health care administration in countries with health insurance addressed direct medical costs rather than income loss (Gosden 1973).

11 This term is from Hoffman (2001, 6).

12 Mutual help societies were known as “friendly societies” in England, Societes de Secours Mutuel in France and Belgium, Krankenkassen in the Germanic countries, Societa di Mutuo Soccorso in Italy, and the Sygekassen in Denmark (Rubinow 1913a, 225). See Gosden (1961, 1973), Gilbert (1966), Johnson (1985), Hopkins (1995) and Riley (1997) for discussions of the friendly societies in England and Starr (1982), Rodgers (1998) and Murray (2003) for descriptions of voluntary sickness insurance arrangements in Europe. Rodgers (1998), Emery and Emery (1999) and Beito (2000) discuss sickness insurance arrangements in North America. Rodgers (1998, 219-220) asserts that the system of workers’ mutual assistance in the United States was extensive and comparable in structure to that of contemporary Europe. In the first decade the twentieth century members of such mutual societies represented 13 percent of the population in England; 10 percent in France; 5 percent in Belgium; 27 percent in Denmark; 10 percent in Sweden; less than 3 percent in Italy and less than one-half of a percent in Spain (Rubinow 1913a, 224-225). For the United Kingdom near the peak of the self-help movement in the 1890s, estimates of participation in friendly societies and trade unions for insurance against the costs of sickness and/or burial range from as many as 20 percent of the population (Horrell and Oxley 2000), to 41.2 percent of adult males (Johnson 1985) to one-half or more of adult males and as many as two-thirds of workingmen (Riley 1997). Beito (2000) suggests that a conservative estimate of participation in fraternal self-help organizations in the United States would have been one-third of adult males in 1920, “including a large segment of the working class.” Millis (1937) reports that 30 per cent of Illinois wage-workers had market insurance for the disability risk in 1919 where fraternal organizations were the principal source of market insurance. Tishler
scholarly examinations of voluntary methods of self-help in Europe, England and North America concluded that the patchwork system of voluntary-income protection was “woefully inadequate”\textsuperscript{13} if not a “dismal failure for meeting the economic and medical needs of a populace” (Hoffman 2001, 9). Lubove (1968, 17) cited Rubinow’s assessment that voluntary mutual aid had been “tried and found wanting”. Rodgers (1998, 218-19) described the voluntary mutual assistance arrangements in the North Atlantic economy as “both a fixture of everyday life and inadequate to it, far-flung and full of holes.” Many authors characterized the self-help organizations like the friendly societies as plagued by financial problems associated with aging memberships.\textsuperscript{14} Finally, as AALL reformers argued, voluntary insurance arrangements could never have covered the poorest classes of workingmen who were most in need of protection.\textsuperscript{15} Reformers and many scholars concluded that the obvious shortcomings of the voluntary arrangements were the impetus for government involvement in social insurance arrangements.\textsuperscript{16}

\textsuperscript{13}Horrell and Oxley (2000, 54) in a study of British households for 1889-90 argue that self-help benefits “did not, in general, appear to be very significant in offsetting even quite dramatic reductions in the earnings of a male breadwinner”.

\textsuperscript{14}Many authors have concluded that mutual aid organizations were insolvent as they had insufficient reserves to manage the increasing benefit pay-outs arising from aging memberships (Kip 1953, Gosden 1961, 1973, Gilbert 1966, Lubove 1968, Tishler 1971, 69, Hoffman 2001, Kaufman 2002, Murray 2003). According to Gilbert (1966, 165-180), competition for members between organizations, ignorance of actuarial principles and Victorian ideology prevented financial reforms that would have ensured the solvency of friendly societies in England. Emery (1996) and Emery and Emery (1999) show that this generalization concerning the financial soundness of fraternal sickness insurance is not supported by the experience of the IOOF in North America.

\textsuperscript{15}Chamberlain (1914, 53). Studies of British friendly societies suggest that friendly society membership was the “badge of the skilled worker” and made no appeal whatsoever to the “grey, faceless, lower third” of the working class (Gilbert 1966, 166, Johnson 1985, Hopkins 1995, Riley 1997). The major friendly societies in North America found their market for insurance among white, protestant males who came from upper-working-class and lower-middle-class backgrounds (Fisher 1917, Emery and Emery 1999). Rubinow (1913b, 166) argued that voluntary insurance as exemplified by the mutual societies “protected only the upper layers of the working class”. Beito’s (2000) work shows that while the poor, non-whites and immigrants were not found in the major organizations’ memberships, members of these populations had their own organizations to secure mutual aid.

Between 1883 and 1914 in several countries in Europe, the administrative machinery of friendly societies and other mutual-aid organizations was the vehicle for introducing and delivering compulsory-government sickness/health insurance.\textsuperscript{17} Compulsory health insurance arrangements implemented by government (and as proposed in the U.S.) closely resembled the contracts of the voluntary mutual aid organizations.\textsuperscript{18} The important differences between the voluntary arrangements and compulsory (government) arrangements were the sources of finance, the extent of coverage in the population, and the coverage of the costs of medical services.

Government health-insurance coverage included prime aged workers under an income ceiling and typically excluded the self employed, agricultural workers, and often, dependents of workers.

In contrast to the developments in Europe, governments in the U.S. showed little activity on the health/sickness insurance field prior to World War I, even though the voluntary friendly society sickness-insurance arrangement declined from at least the 1890s, despite growing memberships in the organizations up to the 1920s.\textsuperscript{19} The origin of the government compulsory health insurance (CHI) movement in the United States was the formation of the American Association for Labor Legislation (AALL) in 1906, which by 1913 had 3,300 members consisting largely of academics, academic physicians,

\textsuperscript{17} According to Rubinow (1913b), the nations with compulsory health insurance were Germany (since 1884), Austria (1888), Hungary (1891), Norway (1909), Great Britain (1911) and Russia (1912). By 1930, 22 countries had enacted compulsory health insurance laws. Rubinow (1913a, 1913b), Armstrong (1932), Starr (1982), US Social Security Administration (1990). Compulsory health insurance was introduced in Bulgaria (1918), Portugal (1919), Poland (1920), Czechoslovakia (1920), Greece (1922), Yugoslavia (1925), the Netherlands (1929), Japan (1922) and Chile (1924) (Armstrong 1932).

\textsuperscript{18} For a description of Continental sickness funds see Murray (2003).

\textsuperscript{19} Emery and Emery (1999) and Emery (2006). Only through the 1930s did commercial and non-profit group health and hospital insurance plans rise to primacy in the sickness and health insurance field in North America. Employer-purchased/provided group plans came to be the most common source of the health insurance coverage in the United States (Applebaum, 1961; Follmann, 1965; Davis, 1989; Thomasson
intellectuals and social reformers.\textsuperscript{20} The AALL interpreted the lack of CHI in the U.S. as evidence that the nation was a social laggard in a natural evolution from deficient voluntary arrangements.\textsuperscript{21} Fisher (1917, 15) argued that while the “most enlightened and progressive nations of the world have, one after another, adopted compulsory health insurance” the U.S. could be grouped with the European countries without government health insurance; Italy, Spain, Portugal, Greece, Bulgaria, Albania, Montenegro and Turkey.\textsuperscript{22}

The first steps towards CHI came with an AALL committee report in 1912 that recommended some form of insurance to offset income losses associated with accident and illness. By 1914 the AALL had drafted model legislation for a public health insurance system that could be used by states interested in introducing legislation. Between 1915 and 1920, as many as 18 U.S. States investigated Compulsory Health Insurance.\textsuperscript{23} California and New York had the most advanced developments towards

\textsuperscript{21} Rubinow (1913b) described the process as beginning with the regulation of voluntary benefit societies to ensure their safety and efficiency. Subsidies to stimulate the growth of voluntary insurance institutions followed, which in turn led to the “modern system of sickness insurance” of CHI.
\textsuperscript{22} Canada and Australia would also be part of this laggard group at this time. Castles (1992) challenges Australia’s status as a laggard. Australia’s first national health insurance law was not enacted until 1944, but after 1907 arbitrated wage awards stipulated that wages could not be reduced if a worker was absent from work due to sickness.
\textsuperscript{23} See Anderson (1968) and Hoffman (2001, 2). Lubove (1968, 67) states that versions of the AALL draft bill for CHI were introduced into the New York, Massachusetts and New Jersey legislatures in 1916 and in 15 other states in 1917. Moss (2002, 174) reports that twelve state legislatures took up health insurance bills. Lapp (1920) lists 11 official state commissions that reported on compulsory health insurance. Massachusetts (1917), California (1917 and 1919), New Jersey (1918), Ohio (1919) and New York (1919) had commissions that reported in favor of compulsory health insurance. Connecticut (1919), Wisconsin (1919), Illinois (1919) and Massachusetts (1918) reported against compulsory health insurance. In addition to these states, Lubove (1968, 67) reports that investigating Commissions were authorized in New Hampshire, Ohio, and Pennsylvania, and the Governors of California, Massachusetts and Nevada endorsed health insurance in their inaugural messages in 1916. One Canadian Province, British Columbia, investigated government health insurance in 1919.
introducing CHI.  

Model legislation for government health insurance was proposed in the New York Legislature in 1919, but the Davenport-Donohue Bill never made it to a vote. Anderson (1950) argues that the AALL movement peaked in 1918. According to Paul Starr (1982), a movement for health insurance did not exist in the 1920s. With the dire conditions of the 1930s, the interest in government health insurance was re-invigorated but unlike the earlier era, the discussions of health insurance shifted away from insuring income loss and towards the coverage of physician services and hospitalization.

2. The Historical Controversy over CHI: The AALL Case and the Business Rebuttal

By 1920 the AALL appeared to be the only group in favor of government health insurance in the U.S. Business, private (Life) insurers, medical professionals and some prominent unions were allied against Compulsory Health Insurance. Given that reformers expected gains for industrial wage-workers from CHI to be large enough to mobilize workers’ interests to aid in the passage of CHI, their greatest surprise was the indifference of the general public to their cause. Given their belief in the shortcomings

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24 In 1917, the California State Senate and State Assembly both passed the proposed constitutional amendment that would have allowed the State’s legislature the power to introduce government health insurance but on California’s election day in 1918, the referendum on the health insurance amendment went down to defeat by almost a three to one margin (Numbers 1978, 81; Moss 1996, 151).


26 Epstein (1933, vii) suggested that the movement towards social insurance and social legislation in the United States “suffered a serious setback during the prosperity boom” in the 1920s as wage-earning Americans lost sight of their true need for social insurance. Douglas (1936, 3-4) noted this possibility with respect to savings for old age: “The consensus of public opinion was that American citizens could in the main provide for their own old age by individual savings… the upward surge of the stock market, was a powerful force holding back all protective legislation while the rise in real wages lulled the majority of the working class into a condition of more or less acquiescent satisfaction.”

27 Anderson (1950, 387) Rubinow (1934, 214) identified this lack of support amongst Americans as the reason why it appeared that “everybody was against it”. Anderson (1968, 87) observes that “during this early period of agitation for health insurance, there was no broad base of support – or, for that matter, of opposition. The fight was between individual giants on Olympus, to which the general public seemed to
of voluntary arrangements, including the capacity of households to save, AALL reformers asserted that wage-workers needed social insurance. With the AALL proposal that employers and states pay 60 percent of the cost of insurance, AALL reformers argued that workers would pay a fraction of the cost of a generous level of health and sickness insurance coverage. CHI coverage would extend insurance coverage to the lowest paid and most vulnerable of the wage-earning classes.\textsuperscript{28} The AALL reformers interpreted the greater extent of coverage in the compulsory systems as a success of such arrangements over the voluntary insurance systems.\textsuperscript{29}

Opponents of CHI proposed higher wages, voluntary thrift, voluntary insurance and public health initiatives as workable alternatives to state insurance. In the view of the National Civic Federation, an alliance of American employers and conservative labor leaders, “American workers were too well-off to require such a system (like the British insurance system)… British workers were so low paid that the Insurance Act is a boon to them,” but “prosperous American workers would reject similar assistance from the state” … “the economic condition of the average American workman enables him to provide for medical attendance and pecuniary support during sickness in his own way and at his own cost”. \textsuperscript{30}

\textsuperscript{28} AALL (1916, 239). See also Moss (1996).
\textsuperscript{29} Epstein (1933, 469) claims that voluntary subsidized health insurance covered a small proportion of the population. Denmark with its generous state subsidies had 57 percent of population covered by voluntary health insurance; Belgium was next highest with 14 percent of the population covered, then Sweden with 12 percent and the rest of the countries with voluntary systems below 10 percent. In contrast, the extent of insurance coverage in the 22 countries with compulsory health insurance by 1927 ranged from 15 percent to 86 percent of the employed population. See also Armstrong (1932, 348).
\textsuperscript{30} Hoffman (2001, 54, 58). Americans on average were wealthier than their European counterparts. Haines and Goodman (1995) find higher rates of home ownership and higher levels of wealth in the U.S. Wealth was also more equally distributed in the U.S. than in the U.K. (Shanahan 1995, Lindert 2000).
A major challenge for the reformers pushing for health insurance for Americans, suggests Hoffman (2001, 58), was that they had to “defend the very idea that the United States had grave industrial problems comparable to Europe’s”. The reformers interpreted the economic insecurity of wage-workers as an inherent feature of industrial development, and social insurance as an obvious solution for the wage-worker’s situation (Rubinow 1913a, 28-29). Rubinow claimed that American workers lived with the risk of more accidents, more sickness, more premature old age and invalidity and more unemployment than wage-workers in most European Countries. While the wages of Americans were higher than for European workers, the reformers believed that they were still inadequate for American households to accumulate and protect themselves against economic hardship from events like sickness, unemployment, old age and invalidity.31 Rubinow (1913a) claimed that the American wage-earning family did not have the necessary surplus in their budget to save for the “rainy day” or to buy the insurance that they needed.32

The AALL’s view of the inability of the American family to save to address income risks was not an evaluation of actual savings experiences of households. Rather Rubinow (1913a) judged the high level of American wages in relation to the American cost of living and the “American Standard of life”. Indeed he compared American wages

31 Rubinow (1913a, 1934) and Epstein (1933) interpreted the savings of workingmen to be too small to provide any true economic security. Opponents of CHI argued that the growing numbers of depositors and size of deposits in savings banks showed that workingmen were able to accumulate money for a rainy day. Claiming that most of the value of the deposits reflected the deposits of the “middle class”, Rubinow (1934, 32-33) argued that “the increased savings of the wage-workers are a myth without much foundation in fact even to justify it.” See also Epstein (1933).

32 AALL reformers concluded that a surplus in the workingman’s budget was a rare phenomenon. For example, Rubinow (1913a, 39) reported that one-half of American families had a surplus at the end of the year. While the average surplus was quite high at $120.84, among the “normal families” with only one worker, the surplus was only $33. According to Moss (1996, 137), “careful observers estimated that typical working families saved less than a single week’s income per year.”
against what the American standard of living “ought to be” — not how the majority of
the working class lived, but the standard that existed for some wage-workers and to
which all workingmen could aspire.\footnote{Rubinow drew on John Mitchell’s ideal described in his 1903 book \textit{Organized Labor}.} Accumulation, savings, or extra income could not
provide legitimate protection if they were not the product of one earner per household
and if the other standards of decency in consumption were not met.\footnote{Epstein (1933, 101) believed that “the American standard assumes a normal family of man, wife, and
two or three children, with the father fully able to provide for them out of his own income”. According to
Rubinow (1913a, 34), any financial accumulation that was gained by deploying women and children to
work represented a “vice of thrift”: “Evidently a theory of the economic status of the worker’s family, of
the necessary standard, of the probability of a surplus, and the possibility of savings, must be based upon
the earnings of the head of the family exclusively.”} Rubinow (1913a, 9) believed that a large majority of wage-workers had insufficient income to maintain a
“normal” standard of living and to have a surplus, hence “saving for all possible future
emergencies must necessarily mean a very substantial reduction of a standard already
sub-normal.” Over time scholars came to interpret this notion of a minimum standard of
decency in consumption as an insufficiency of income to meet subsistence needs.\footnote{See Moss (1996, 137), Hoffman (2001), Moss (2002, 7) and Glenn (2001, 640). For example, Epstein
(1933, 96-99) presented estimates of “Weekly budgets for a standard of health and decency for a family of
five” that were produced between 1920 and 1931 for a variety of American locations and industrial groups. Epstein assessed that throughout the 1920s, “The absolute minimum required for the decent support of a

To maintain a proper standard of living Rubinow (1913a, 32) assessed that
“Families having from $900 to $1,000 a year are able, in general, to get food enough to
keep body and soul together, and clothing and shelter enough to meet the most urgent
demands of decency.” Rubinow estimated that 90 percent of males living east of the
Rockies and north of the Mason Dixon line earned less than $800 a year and 95 percent
of female workers earned less than two-thirds of the amount necessary for “physical
efficiency and decent existence.” According to the reformers, conditions of working
Americans got worse, not better after World War I. Where the general statistical pattern
was believed to have shown dramatic increases in wages between 1866 and 1900, Rubinow (1913a, 34-37) presented indices showing that real weekly earnings were not rising between 1890 to 1907 because of falling hours of work and rising food costs. Epstein (1933, 102) concluded that “in the last decade only very few of our workers have earned enough to maintain for themselves and their families a decent American standard of living… They have rarely been able to meet fully the day-by-day expenses of decent living, let alone laying aside any savings against rainy days.” In the minds of the reformers, a growing American economy was not going to solve the problems of the working class and eliminate the need for social insurance.

3. Modern-Scholarly and Contemporary Appraisals of the AALL CHI Movement

Scholarly interpretations of the failure of the AALL health insurance movement side with the AALL view of the superiority of the compulsory government arrangement over the voluntary arrangements. The conclusion follows that the lack of CHI in the United States represents a policy failure since wage-workers would have been better off with CHI than with continuing to rely on voluntary arrangements for meeting the costs of illness. To explain this policy failure, scholars have looked to distinct features of American society such as ideology, political institutions and interest groups. As these features of the society are slow to change, the interpretation follows that the reasons for the rejection of CHI are informative for understanding why the U.S. remains the only advanced industrial nation without national health insurance. This class of explanations for the failure of the AALL CHI movement has failed to produce a satisfactory complete

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worker’s family was about $35 per week”, or $1,820 per year. Epstein referred to this amount as the minimum for “decent subsistence”, and the “minimum budget”.

36 When Epstein (1933) compared earnings data from the National Industrial Conference Board for the 1920s to his estimates for a “minimum budget”, not a single group of workers could have earned this
explanation and the reason likely rests with the AALL views on the needs of American wage-workers that has directed the scholarly investigations.

Rubinow (1931, 185) blamed the failure of the AALL health insurance movement on the failure of the reformers to adequately educate labor “to appreciation of its own interests” to overcome ideological biases against social insurance. Laborers mistakenly believed that health insurance was “un-American” since it would subvert individual initiative and self-reliance; after World War I they accepted opponents’ arguments that health insurance too “socialist” and too “Prussian”. In this regard, Rodgers (1998, 255) notes that the American debates over social insurance were similar to the “polarized rhetorical contests in Germany in the 1880s and in Britain after 1908.” Gilbert (1966) argued that the Victorian ethics of self-reliance and laissez-faire were important impediments to the introduction of old age pensions and health insurance in England in the last quarter of the nineteenth century that were overcome by World War I.

In the policy failure interpretation, U.S. political power is too decentralized to facilitate the introduction of government health insurance and other large-scale social

minimum amount in any year of a particularly prosperous decade in American history.

37 Fox (1983) describes a sociological perspective that social evolution outpaces the capacity of some individuals and groups to adapt to it. Compulsory Health Insurance in the US was not adopted before 1920 because the reformers, primarily academic physicians and economists, promoting it failed to adequately educate lagging fellow Americans.

38 Rubinow (1913b) argued that the American “fetishism of self-help” was a powerful force that prevented the introduction of compulsory social insurance. Lubove (1968, 2-3) argues that the ideology of voluntarism and the institutional interests that it nurtured resulted in the existence of voluntary institutions that failed to respond to the security needs of Americans and that undermined government efforts to meet those needs.

39 According to Fisher (1917, 14-15), the logic of this claim that CHI was an “un-American interference with liberty” meant that “in order to remain truly American and truly free”, was “to retain the precious liberties of our people to be illiterate, to be drunk, and to suffer accidents without indemnification, as well as to be sick without indemnification.” See Numbers (1978), Costa (1995), Hoffman (2001, Chapter 3) and Quadagno (2005) for a discussion of these views. According to Numbers (1978, 25), anti-Prussian sentiment was an important reason that the AALL followed the British approach of calling their proposed arrangement “health insurance” rather than using the German term for the arrangement, “sickness insurance”, even though the AALL had modeled their proposed CHI legislation on the German rather than the British system.
programs. Starr (1982) observes that the U.S. had universal male suffrage early on its history, but CHI was introduced first in authoritarian and paternalistic regimes and only later in liberal democratic societies. Beland and Hacker (2004) note that the United States has never been as centralized as European nation states, in part because its constitutional structure divides political power so as to discourage the construction of authoritative majorities and powerful bureaucracies. In this context, constitutional limits prevented the federal government from introducing national health insurance and constrained state government actions. Moss (1996, 156-157) argues that the threat of a “competitive disadvantage” for states introducing CHI compared to states that did not was a critical impediment for the CHI movement. A puzzle remains, however, as to why these institutions would be a barrier to the development of compulsory health insurance, but not for public pension legislation in 1935, nor for workers’ compensation laws before World War I.

Moss (1996, 157) argues that CHI threatened special interests more than other forms of labor legislation. Fraternal insurers opposed CHI since the model legislation excluded them as possible insurance carriers, and commercial-life insurers feared that funeral benefits in CHI would undermine the demand for their industrial insurance. Scholars have identified Doctors organized through the American Medical Association as having provided the strongest opposition to state sponsored health insurance before 1920, even though physicians could anticipate enriched incomes if the state assumed

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41 Lapp (1920, 32) indicates that the Wisconsin commission on health insurance that reported in 1919 concluded that state contributions for CHI would be unconstitutional.
43 Beito (2000), Fox (1986, 13) and Kaufman (2002). British industrial-life companies did not offer sickness insurance until 1911 when the government included them as approved societies under the National Health Act. In acting as approved societies, their motive was not to write sickness insurance but to protect
responsibility for paying for physician services. While many labor leaders expressed support for compulsory health insurance, Samuel Gompers, the president of the American Federation of Labor, opposed compulsory insurance based on his belief that higher wages would solve workers’ problems arising from illness. Sombart (1906, 1976) argued that the exceptional social mobility of American workers diminished their interest in socialism generally. Since American wage-workers could expect large gains in their material well-being because the benefits of growth were shared between labor and capital, they had less reason to look to the State to improve their well-being.

As Lubove (1968, 66) argues, Worker’s Compensation demonstrated the ability of interest groups to adapt their private ends to a collective welfare program, whereas the failed campaign for CHI reflected the mobilization of resources by these same interests to thwart a form of social insurance from which they anticipated no material advantages.

For employers, CHI would have introduced a liability rather than shifting an existing liability as under worker’s compensation. AALL reformers expected social insurance

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44 Anderson (1950, 1968), Numbers (1978), Fox (1986), Engel (2002). The AMA and most state medical societies were initially supportive of government health insurance before 1914, but they lost interest in it during World War I and by 1920, they were clearly opposed to it. An important reason for physician opposition to CHI was that AALL legislation proposed to re-organize how medical services were provided without any clear benefits for physicians to compensate for the loss of professional autonomy.

45 Numbers (1978, 60). See Hoffman (2001, Chapter 6) for a discussion of the divided views of organized labor in the United States. Rodgers (1998, 258) argues that mixed and ambivalent attitudes towards compulsory social insurance on the part of organized labor was not unique to the United States. Before 1914, labor organizations were not a significant force in the adoption of social insurance or involved in the design of the schemes. Labor organizations throughout the North Atlantic economy resisted the levies on wage-workers that social insurance required.

46 Social insurance in Europe and England was intended to address “social discontent” or “socialist unrest” and ensure worker loyalty to the state rather than to Labor interests. In the absence of threat to political stability in the U.S., interest groups had no incentive to develop legislation through compromise (Gilbert 1966, Sombart 1976, Starr 1982). Rodgers (1998, 242) notes the irony that Bismarck had introduced social insurance as an “antisocialist” project but in the United States in the AALL campaign for compulsory health insurance, it was reframed as a socialist demand.

47 According to Fishback and Kantor (1998) workers’ compensation legislation was established by a coalition of workers, employers and insurers who expected gains from shifting the existing negligence liability system based on common-law rule to one of strict liability. Workers and their families could
as exemplified by CHI to redirect market forces so that employers would profit by preventing the leading sources of poverty, industrial accidents, disease and unemployment (Moss 1996, 60-64). By internalizing the external costs of industrial society, social insurance was akin to a Pigouvian tax whereby the employer’s liability for workman’s compensation and unemployment benefits was an incentive to provide a safer, healthier workplace and regularize employment. 48 The expected outcome of the social-insurance induced incentives for prevention would be a society with reduced incidences of disease, accident and idleness with gains for employers, workers, their families and their communities that paid poor relief.49 The failure of the AALL CHI movement suggests that interested parties were not convinced by the line of argument that social insurance would reduce their costs through the prevention of disease and illness.50

None of the explanations described above adequately explain the wage-workers disinterest in CHI by, particularly as their indifference allegedly ran counter to their self-

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48 Lubove (1968, 76). According to Moss (1996), the reformers believed that the central problem of industrial society was that the employer assumed no responsibility for a worker’s human capital. When a worker fell sick, was injured on the job or was not needed when production fell, the employer either hired another worker or left the community and the family to support the idle worker which shifted the costs of health care and lost wages onto the family and the community. Since the family and community were third parties to the labor contract, and due to the unequal bargaining power between employer and employee, wage contracts failed to internalize the external costs of industrial society. Fishback and Kantor (1992) offer mixed evidence on this claim. With their wage data for the period 1884-1903, they find that wage levels fully compensated for unemployment risk, partially compensated accident risk but did not compensate for occupational illness.

49 According to Moss (1996), insurance and prevention were the main objectives of the AALL in the design of the legislation. Some AALL members like Rubinow argued that social insurance was class legislation that should incorporate income redistribution as part of its design.

50 See Hoffman (2001, 96-100). The Illinois and Wisconsin commissions that investigated health insurance concluded that there was no evidence that CHI promoted health. The Illinois commission concluded that it would be unfair to charge industry with any of the cost of sickness among wage-workers and their dependents (Ransom 1920, 44; Lapp 1920, 32).
interest. This apparent contradiction suggests a need to revisit the key assumption of the policy-failure interpretation: would wage-workers have gained from CHI? Did enough Americans need compulsory health insurance to deliver the necessary political clout?


Scholarly interpretations of the failure of the AALL health insurance movement side with the AALL view of the superiority of the compulsory government arrangement over the voluntary arrangements. The conclusion follows that the lack of CHI in the United States represents a policy failure since wage-workers would have been better off with CHI than with continuing to rely on voluntary arrangements for meeting the costs of illness. If this view of the superiority of CHI over voluntary sickness arrangements is correct, then one would expect that the efficiency gains from CHI would have resulted in lower cost insurance that was more affordable for wage-workers than the available voluntary contracts. Compulsion and lower insurance costs would have resulted in a meaningful extension of health insurance coverage. To assess if CHI stood to be welfare enhancing for American wage-workers, I compare the costs and expected benefits of two contracts: the one defined in the AALL’s proposed CHI act, and the other the sickness-insurance arrangement of the Independent Order of Odd Fellows (IOOF). I interpret the IOOF sickness-insurance contract as representative of the insurance available to American wage-workers. As the Odd Fellows members were drawn from the more affluent of wage-workers, this comparison shows whether this selection of members was a product of the high price of voluntary insurance.

The AALL’s (1916) draft of an act for Compulsory health insurance provided for
the compulsory participation in the insurance arrangement of all manual workers whatever their earnings, and other employees (mostly expected to be clerks and foremen) earning less than $1200 per year. The proposed insurance benefits provided by CHI appeared to be generous and extensive. The draft act called for cash benefits equal to 2/3 of weekly wages that were to be paid commencing with the 4th day of disability to a maximum of 26 weeks in a 12 month period; medical, surgical, and nursing attendance as well as medicines and surgical supplies for the insured and his/her family; for insured women and wives of insured men, maternity benefits which included medical and surgical attendance plus 8 weeks of cash benefits equal to 2/3 of weekly wages; and a $50 funeral benefit to be paid to the survivors of insured members who died while in receipt of cash benefits, or who were within 6 months of the discontinuance of cash benefits due to reaching the 26 week limit for their payment. Finally, the draft-act called for extension of coverage for individuals whose contributions ceased on account of unemployment not due to sickness. In these cases, the insurance was to remain in force for one week for each 4 weeks of paid up contributions in the previous 26 weeks.

The cost of the insurance for the employed individual was unclear. If implemented in the U.S., then the AALL expected the cost of CHI coverage to be between 1.6 percent and 4 percent of a wage-worker’s annual income, depending on how much of the cost could be shifted onto employers and the State. The AALL’s belief that sharing the cost of insurance across the insured employee, the employer and the state

51 Other persons could join the insurance scheme on a voluntary basis, including self employed persons with earnings of less than $1200 per year.
52 Fisher (1917), Starr (1982), Costa (1995). Based on German experience, the AALL suggested that a premium of 4 percent of wages was needed to finance the benefits (Lubove 1968, 71). In compulsory sickness insurance funds in Europe, employees contributed one-half to two-thirds of the funds with employer contributions making up the balance (Murray 2003, 229). In England, employees paid 7/9 of the costs of their benefits, and the state paid 2/9 (Gilbert 1966, 354-355).
would encourage the prevention of illness resulted in the proposal that the employee and 
employer would each pay 40 percent of the insurance cost, and the state would pay the 
remaining 20 percent. 53 Assuming that the employer’s share of the cost would not be 
passed on to the employee through subsequent wage reductions (or reduced wage 
increases), this meant that the insured would pay only 1.6 percent of annual income to 
secure a generous level of insurance coverage.54 

For wage-workers, the appeal of the proposed CHI arrangement would have 
depended on whether the insurance was going to cost them 1.6 percent or 4 percent of 
annual income and on whether they desired such a high level of insurance coverage. To 
see this, consider the cost of voluntary insurance as provided through the IOOF, the 
largest sickness insurer in the United States until 1927 (Emery and Emery 1999). As a 
member of the IOOF, an individual was eligible for a cash-sickness benefit of typically 
$3 to $5 per week of disability beginning with the 8th day of disability and lasting until 
the 52nd week of sickness, after which time the amount of the benefit was reduced to $1 
per week. IOOF subordinate lodge memberships could choose to contract with a 
physician to provide medical attendance and medicines for lodge members, but attentive 
benefits provided by lodge brothers were mandatory. Like the proposed CHI 
arrangement, the IOOF offered members a funeral benefit of $30 to $100 (depending on

53 AALL draft legislation also detailed a sliding scale where the employer paid from 80 percent of the 
insurance costs for the lowest wage workers to 40 percent for workers with higher wages. AALL (1916, 
250-255) “Health Insurance – tentative draft of an act”.

54 In making a case that CHI would not increase an employee’s financial burden, Chamberlain (1914, 64-
65) reported studies that showed that households in New York with family incomes between $600 and 
$1100 spent 4 percent of their incomes, close to the expected cost of CHI coverage, on insurance and 
services that would be covered by proposed CHI legislation. Thus, CHI would secure the same benefits 
and services for 1.6 percent rather than 4 percent of income. Kantor and Fishback (1996) show an 
enormous reduction in precautionary savings following the introduction of workers’ compensation laws 
which also suggests that social insurance for workplace risks could have freed up a large portion of the 
household budget for other uses.
the jurisdiction/state). While the IOOF did not provide maternity benefits, it did provide widows and orphans benefits that were not included in the proposed CHI act. Beyond these stipulated benefits, all lodges could choose to pay higher amounts of cash relief to brothers in need, or to pay for medical attendance on a discretionary basis. In friendly societies like the IOOF the cost of this sickness insurance coverage was $6 to $10 per year. Further, the levels of coverage for the sickness and funeral benefit could be almost doubled by joining an auxiliary branch of the organization for a similar cost.

CHI had a higher cost for wage-workers than the existing voluntary insurance arrangements but it also provided more generous benefits in the event of sickness. For a $600 earner, the $6 to $10 annual cost of IOOF sickness insurance (1 percent to 1.5 percent of annual earnings) secured a benefit of $3 to $5 per week of sickness. Assuming a CHI premium of 4 percent of earnings, a wage-worker with annual income of $600 would have been compelled to pay $24 per year for health insurance coverage. On the other hand, assuming that state taxes and wage rates did not change in response, if employers and the state paid 60 percent of the premium cost, then a $600 earner would have secured the benefits of CHI for only $10. If the cash benefit paid while sick was 2/3 of the weekly wage as proposed by the AALL, then for $600 annual earnings, $10 to $24 per year would have secured a benefit $9 to $10 per week of sickness.

Further comparison of the draft CHI act and voluntary insurance arrangements requires some description of the risk of illness for a wage-earner to determine the size of

55 Emery and Emery (1999). The IOOF levied one time joining fees of $10 to $12 as well. Nominal values of dues and benefits paid did not typically change over time. It was the case in constant purchasing power terms, the value of these benefits was eroding over time.
56 Emery and Emery (1999, 53). Individuals could also choose to belong to more than one organization.
57 It is not clear that the CHI benefit would have been as generous as the AALL proposed. Numbers (1978, 81) notes that a 1918 New York CHI Bill limited cash benefits to $8 per week of sickness.
the expected income loss and the size of the expected insurance benefit.\textsuperscript{58} For this purpose, I use data compiled by the IOOF Grand Lodge of Ontario between 1896 and 1898 on the sickness benefit claims experience of Odd Fellows by single years of age from the semi-annual returns of IOOF subordinate lodges. The semi-annual returns listed the names, ages, and the duration and dollar value of sickness benefits paid to lodge brothers who sick and unable to work.\textsuperscript{59} Although IOOF claims statistics understate the incidence of sickness (members in arrears for due being ineligible for claims), the data provide a hypothetical morbidity model that serves for comparison of the CHI and Odd Fellows contracts.\textsuperscript{60} These data are representative of the Order’s experience in North America for the period 1890 to 1910, but they suggest a higher incidence and duration of illness in the late 1890s than the experience of the Order’s members by 1910.\textsuperscript{61}

\textsuperscript{58} I focus the evaluation on the value of cash benefits under the two plans which would have been the most important aspect of the insurance since income loss due to an inability to work was the important cost of illness at this time. It is also not obvious that successful CHI legislation would have included paying for medical care. Physicians would have supported CHI if it had not included coverage for their services and the final report of the California Social Insurance Commission released in 1917 recommended CHI for the state but that cash and medical benefits have separate administration (Numbers 1978, 72, 79). The 1916 Millis Bill for CHI in New York did not include medical care for families of insured persons or maternity benefits (Numbers 1978, 37). Further, the CHI arrangement on the surface may appear to provide more than the IOOF contract in terms of insurance coverage but in practice, this may not have been the case since the IOOF provided many forms of relief on a discretionary basis, and where CHI had maternity benefits, the IOOF had widows’ and orphans’ benefits. Finally, the lower premium cost for the IOOF coverage relative to the CHI contract meant that households would have had more income under the voluntary arrangement to pay for medical attendance and medicines.

\textsuperscript{59} The detailed data are provided in Appendix 1. See Emery and Emery (1999) for discussions of the IOOF and its sickness benefit arrangements.

\textsuperscript{60} For discussions of the interpretation of benefit claims data as morbidity data see Riley (1997), Emery and Emery (1999) and Murray (2003). Armstrong (1932, 295-296) argues that statistics from organizations like the IOOF understate the incidence and duration of sickness since they include illness lasting 8 days or more, and they tend to represent the experience of members selected on the basis of age and good health. On this latter point, see Murray (2003). Actuarial calculations for the 1911 NHI in England were based on IOOF Manchester Unity sickness claims experience for 1893-97. The IOOFMU was the largest British Friendly Society with a national membership that was thought to be representative of the population to be insured under the NHI. Because the IOOFMU selected its members rigorously while NHI would not, actuaries in England in 1910 estimated that the incidence of compensated sickness under the NHI would be 10 percent above IOOFMU experience. (Gilbert 1966, 384).

\textsuperscript{61} See Appendix 1 for this comparison. While the Ontario Grand Lodge of the IOOF compiled these statistics, other Grand Lodge jurisdictions investigated by Emery and Emery (1999) did not. As such, I am not certain if similar tables are reported in Grand Lodge Proceedings in other U.S. states.
Table 1 presents estimated equations that describe the risk of falling sick for at least one week, and on the number of weeks of sickness conditional on being sick for at least one week, as a function of age and age-squared. Table 2 present the expected incidence of compensated sickness and the expected duration of compensated sickness by age group generated with the estimated coefficients in Table 1. Over the ages of 20 to 70, these data suggest that an insured male could expect to experience 0.88 weeks (6.5 days) of compensated sickness per year. The probability of sickness lasting at least one week was 0.15 per year and conditional on being sick for at least one week, an Odd Fellow received cash sickness benefits for an average of 5.72 weeks. The incidence and duration of sickness related disability increased between the ages of 20 and 70. A 20 to 24 year old male had a probability of 0.09 of being sick for at least one week, 3.9 weeks of compensated sickness if they fell sick for a week, and an expected duration of compensated illness of only 2.5 days. By age 40, the expected duration of compensated illness had increased to 5 days and the risk of falling ill to 0.14, and by age 60, 20 days of expected sickness compensation and a probability of sickness of 0.3.

Table 3 uses the sickness experience described in Table 2 to compare the generosity of the cash benefits in the AALL’s proposed CHI act with the IOOF’s voluntary arrangement. With the AALL’s proposed CHI arrangement, a $600 earner

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62 Armstrong (1932, 284-296) reports a range of estimates for work days lost due to sickness of 6 to 9 per worker from studies using data from various years between 1915 and 1930. Hoffman (2001, 7) cites a 1916 U.S. Public Health Service estimate that a given worker missed an average of nine working days per year due to sickness.

63 This estimate likely understates the expected cash benefit with CHI since payment of benefits commenced on the fifth day of sickness rather than the 8th day as under the IOOF contract. Actuaries estimated for England in 1910 that if NHI sickness benefits were to be paid from the first day of sickness rather than from the fourth day, the sickness benefit payments would be 2 percent higher (Gilbert 1966, 354, 384-385). As the spells of sickness of 5 and 8 days in length were less frequent than spells of 1 to 4 days in duration, this estimate of a 2 percent understatement of the CHI benefit paid from the 5th rather than 8th day of sickness is an upper bound.
could expect to receive $6.81 in cash benefits per year, and an earner at the $1200 ceiling for compulsory coverage could expect a benefit of $13.63 per year. With the IOOF cash benefits of $3 to $5 per week of sickness, expected cash benefits were $2.64 per year for both income levels.

From the age specific calculations in Table 3, we can see that the advantage of CHI over the IOOF arrangement with respect to cash benefits was at higher ages where expected claims durations were longer. For men under age 30 earning $600 per year, the difference between the expected benefits under the two schemes was less than $2 compared to a difference in contribution amounts of $4 to $18. Consider as well that the IOOF members could effectively double the size of their cash benefit by joining the organization’s auxiliary branch for roughly the same cost as the IOOF membership. For $600 earners under age 35, this means that the voluntary arrangement could provide a similar level of benefit coverage as CHI for around $12 per year, or half of the cost of the CHI if the employee had had to pay the full cost of their insurance.

Table 4 compares the size of the annual expected sickness benefits to the annual contributions that were to be paid. The IOOF contract resulted in 44 cents of expected benefit for each dollar of contribution, while the CHI contract would have provided 28 cents of expected benefit for each dollar of contribution if wage-workers paid the full cost and if benefits were set to replace 2/3 of the wage. This comparison may be too unfavorable to CHI, however, as the CHI arrangement was set to collect 4 percent of a wage-worker’s income but that was to pay for medical treatment as well as cash and other benefits while the IOOF contract provided cash and other benefits. The most comparable situation for assessing insurance cost would thus net out the share of the
insurance cost that was to pay for medical benefits. According to Gilbert (1966, 349), actuaries involved in the British National Health Insurance planning estimated that the cost of providing medical benefits would account for 20 to 25 percent of the total insurance cost. Thus a reasonable estimate for the CHI premium needed to provide the range of benefits provided by the IOOF was 3 percent, rather than 4 percent. At a 3 percent CHI premium, each dollar of contribution would yield 38 cents of expected benefit. Comparing the expected value of cash benefits to premium contributions, a CHI premium of 2.6 percent would have matched the cost of IOOF sickness insurance. This suggests that a premium of 4 percent of annual income to be entirely paid by the insured individual would be too high to make CHI an attractive alternative to the available voluntary insurance contracts in terms of dollars of expected benefit to dollars of expected contribution. Only at a substantial subsidy as proposed by the AALL or the exclusion of coverage for medical expenses to reduce the contribution rate to 3 percent, would the CHI insurance cost be competitive with the IOOF contract.

Tables 3 and 4 shows that the AALL’s proposed CHI contract should have appealed more to men over age 40 than to men under age 40, and for higher income earners than lower income earners. For men under 40, the voluntary fraternal insurance arrangements provided comparable levels of benefits to CHI at a lower cost. The principle advantage of the CHI contract was to increase the level of benefits as incomes and expected sickness duration increased. Despite its more generous cash benefits, however, CHI did not necessarily address the insurance needs of older working Americans. CHI primarily insured acute illness with short spells of disability. With increasing age, the risk of illness shifts from that of acute illness to chronic illness which
was not going to be adequately insured under the draft act.\textsuperscript{64} With chronic illness and long spells of disability, a pension arrangement with long term payment of benefits would be more suited to insuring households than short term cash benefits as under CHI. The voluntary contract as provided by the IOOF would have been more suited to insuring chronic illness than the AALL’s proposed plan since cash benefits continued for 52 weeks and beyond.\textsuperscript{65}

The preceding comparison shows that CHI with its higher cost insurance was intended to benefit lower wage-workers who chose not to purchase lower cost voluntary sickness insurance. Rodgers (1998, 243) describes how some proponents of compulsory health insurance in the United States viewed social insurance like CHI as nothing more than a complicated scheme for compulsory savings. The main purpose of CHI would have been to compel wage-workers to purchase higher levels of insurance coverage. Whether or not compulsory savings would have been a benefit to households would depend on whether it was the case that they were otherwise unable to meet the expected costs of sickness.

5. **Differential Savings Rates and the American Experience with CHI**

Was it true that American wage-workers’ incomes were insufficient for households to save, or to allow households to purchase sickness/health insurance through voluntary arrangements as the AALL reformers alleged? To answer this question, I use

\begin{itemize}
\item \textsuperscript{64} Bachman and Meriam (1948, 256, 260) show that for the U.S. in 1940, number of days of disability per person per year from acute illness was 2.5 versus 7.3 for chronic illness. The frequency of cases of chronic illness in the population increased with age as did the associated days of disability per year person, rising from 3.1 days for persons under the age of 25 and rising to 33.4 days for persons over age 65. The frequency of acute illness and associated days of disability did not show similar increases. Days of disability associated with acute illness increased from 2.3 per person under age 25 to 2.7 for persons aged over 65.
\item \textsuperscript{65} England’s NHI included a disability benefit that was paid for an indefinite period beyond the 26\textsuperscript{th} week of sickness. The value of the disability benefit was 5s per week compared to the 10s paid per week for the
\end{itemize}
income and expenditure data from the U.S. Commissioner of Labor Survey of the Cost of Living of industrial workers in the United States and Europe for 1888–1890\textsuperscript{66} and from the 1917–19 Bureau of Labor Statistics Cost of Living Survey.\textsuperscript{67} As compulsory health insurance would have primarily covered male household heads, I consider the size of the household surplus (total income minus total expenditures) relative to the husband’s income to measure a savings rate that would be comparable to the percentage of earnings that would have been deducted for CHI coverage. For 1888–90, I have information on earnings of household members, expenditures on food, rental costs, home and utilities, taxes, insurance, charity, vices and sickness and death. For 1917–19, I have information on earnings by household members, expenditures on food, clothing, housing rent, fuel and light, furniture, insurance, liquor and tobacco, medical expenses, cemetery expenses and “miscellaneous”. \textsuperscript{68} I focus on median values of savings rates since the distribution first 26 weeks of sickness (Gilbert 1966).

\textsuperscript{66} These data are described in detail in Haines (1979), Gratton and Rotondo (1991) and Horrell and Oxley (2000). The survey gathered data on the demographic characteristics, occupations, incomes and expenditures of 8544 families in 24 U.S. states and five European countries who earned income from working in nine protected industries. Wage-workers from the U.S. and the United Kingdom, cotton textile and iron and steel industries dominate the total number of observations, as do male-headed households (Haines 1979). While the survey does not constitute a random sample, Haines (1979, 294) suggests that it is a representative sample of industrial wage-workers. Gratton and Rotondo (1991, 342) suggest that the 1888-90 survey’s inclusion of high wage industries made the sample of households potentially more affluent than the wage-earning population but the survey should be useful representing the conditions of blue collar workers in an industrializing economy. For my purposes of evaluating the need for CHI in the U.S., this sample is useful since the wage-workers represented in the survey would have been included in the compulsory health insurance arrangements. I would also expect that these data represent wage-earning Americans who were eligible to vote (Keyssar 2000). Despite the over-representation of higher earning industrial households in these data, the data are useful for addressing the claims of the AALL reformers. For the 1889-90 sample, I calculate that only 22 percent of American households in this sample had incomes high enough to meet Rubinow’s “minimum level of decency” in standard of living.

\textsuperscript{67} Gratton and Rotondo (1991) report incomes and budget surpluses from the sample of American households in the 1888-90 cost of living survey and from another comparable sample of American households from the BLS 1917-19 cost of living survey. Also see Kantor and Fishback (1996) and Moehling (2005) for discussions of the 1917-19 data.

\textsuperscript{68} Mortgage payments are not reported in the 1888-90 data so household expenditures of home owners are downward biased which will increase the surplus measure (Gratton and Rotondo 1991). To determine the potential size of the bias for the 1888-90 surplus measure, surpluses for 1917-19 are calculated with and without mortgage expenses. These calculations suggest that the median surplus of household heads in 1888-90 would be 1 percentage point lower if mortgage payments were to be included.
of household surpluses is skewed in favor of high incomes resulting in high mean values for incomes and savings.

Table 5 shows the median savings rates for U.S. households by age-group of the household head in 1888–90 and 1917–19 compared to the expected income loss due to sickness. The median savings rates for 1888–90 for males under age 40 were low at below 2.5 percent while for males over age 40, savings rates increased to over 5 percent and reached almost 10 percent for households with heads aged in their 50s. Despite the low savings rate for males under 40, the expected percentage loss of income from sickness was less than 1 percent of income, and as the size of the expected loss increased with age, so did the savings capacity of American households. This increase in savings capacity over the life-cycle would have weakened demand for CHI since younger wage-workers would rationally expect that even if surpluses were small, they expected them to rise in future. As Emery and Emery (1999) argue, the demand for sickness insurance in North America was a transitory demand that disappeared over the life-cycle as the capacity to self-insure through savings, and additional workers in the family, developed.

Based on the 1888–90 savings rate estimates in Table 5, a CHI premium of 4 percent would have removed any income surplus for most households with heads under age 40. This level of premium would in all likelihood have resulted in a reduced standard of living for insured households due to the high cost of the insurance. As Costa (1995) suggests, CHI was an expensive substitute for what workers already had. CHI would have locked Americans into saving for a single purpose for the length of their working lives. The commitment of so much of household income to the insurance of a single risk was not necessarily desirable. Unlike CHI, the household’s savings could be used for
covering any losses of income due to illness, or unemployment.  

Did the capacity of American wage-workers to save and meet sickness related costs deteriorate after 1888–90 as the reformers claimed? Table 5 shows that the estimates for household savings rates for 1917–19 for males under age 40 had increased substantially. Some of this improvement reflects that the larger number of state in the 1917–19 survey included the prosperous western states. Table 5 also shows the savings rates calculated using data only for the states that were included in the 1888–90 survey. Amongst this smaller set of states, savings rates are lower than for the all states sample, but they are still high enough to suggest that households had the necessary surplus to purchase voluntary insurance contracts or meet the expected annual sickness cost. Even by the standards of the reformers, the condition of wage-workers’ households had improved as these higher savings rates were accomplished with less reliance on income from working children. As Weaver (1983) has argued for Old Age Insurance, the need for CHI was falling between 1889 and 1920. The same forces of economic growth behind those developments were also at work with compulsory health insurance.

While households may have had annual surpluses large enough to meet the expected costs of sickness, CHI could have improved their ability to meet infrequent, but large, sickness costs. In this case, the annual savings rate is less informative than

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69 According to Gilbert (1966, 164), English friendly societies opposed the introduction of contributory pension plans not because they competed with the friendly society benefits but because the contributory plan competed for the limited savings of the friendly societies’ working class clientele. If the government plan forced the working man to divert his surplus savings into the government programme, the working man would no longer pay to belong to the friendly society.

70 See Gratton (1996) for a discussion of these developments in the United States.

71 For large losses that occur infrequently, market insurance may be the preferred arrangement over self-insurance depending on the cost of the coverage (Ehrlich and Becker 1972). In assessing an optimistic estimate that aggregate savings in the U.S. amounted to $790 per family, Epstein (1933, 115) asked “How adequate is such a sum for each family in the United States in meeting the different emergencies of modern life? … How far will it go in case of a serious illness, an accident, or surgical operation?”
information on a household’s wealth. A reserve equal to 33 percent of annual income was equivalent to the maximum cash benefits that CHI as proposed by AALL would have provided. Rubinow (1934) assessed that the numbers of savings and other time deposit accounts suggested that over 40 percent of the population had accumulated savings and the average account size was $500. Rubinow argued that Epstein’s (1933, 110-112) “careful statistical work” showed that as the bulk of the value of aggregate savings in the U.S. was not those of “workingmen” but of the “middle class”, a better estimate of the average size of account for the workingman who did save was under $200. With annual incomes for the late 1920s of $1200 reported by Epstein (1933, 100), these estimates of aggregate savings would represent a reserve equal to 14 to 33 percent of average income. It is possible that CHI’s coverage for “catastrophic costs” represented an improvement over what workers had through voluntary arrangements but it is also important to recognize that savings deposits are only one possible savings vehicle. Without knowing how much other wealth was accumulated by workingmen in the form of equity in the home, consumer durables like furniture and so, one can only guess that the reformers’ case was pessimistic.

**6. Were American Savings Rates Exceptional?**

So far I have presented evidence to support the argument that for many American households CHI would not have provided anything over what they had available from voluntary arrangements for meeting the sickness risk. If this observation is informative for explaining the political failure of the CHI movement in the United States, then wage-workers in nations that introduced CHI should not demonstrate the same savings capacities as Americans. Similarly, variations in savings rates across U.S. states should
be informative for explaining why some U.S. states pursued commissions, investigations and in some cases, legislation, toward the introduction of CHI while others showed no interest in the arrangement.

Table 6 presents the median values for household (total) income, the husband’s income and the household surplus for the U.S. and five European countries from the 1888-90 cost of living data. As opponents of CHI argued, American incomes were higher than incomes in Europe, and as proponents of CHI argued, the higher incomes were not generating unusually high surpluses for American families compared to lower earning Europeans. Table 6 shows that for American households in 1888-90, the median value of this measure of the savings rate was 2.2 percent so at least half of the households in the sample were able to set aside enough of current income to meet the full wage loss associated with the expected spell of sickness or to purchase a voluntary contract like that provided by the IOOF. In contrast, Germany where CHI was introduced in 1883 had a median savings rate of zero percent, as did Belgium where subsidies to extend voluntary coverage were used after 1894. France, Great Britain and Switzerland, nations which did not move towards state insurance until after 1900, all had median savings rates twice as high as that for the U.S. This would suggest that the timing of when these nations adopted government health insurance arrangements could be a product of diminishing savings capacities of households in those economies after 1890. Table 7 presents

72 It is important to recognize that American households were generating budget surpluses after incurring expenses related to sickness. American households had higher expenditures reported in the survey category “sickness and death”. The median expenditure in this category for the U.S. was $12 where European households expended less than $5. If we consider these expenditures as those which would be covered under CHI, then the median size of household surplus and expenditures on sickness and death suggests that American households represented almost 5 percent of the husband’s income in 1888-90.

73 It is possible that premiums paid for health insurance in Germany since 1883 eliminated any surplus that households might have had in the absence of CHI.

74 According to Gilbert (1966, 180-181, 220-221), friendly society opposition and a lack of working class
median savings rates by 5 year age groups for the U.S., Great Britain and Germany for 1889–90. Where the median savings rates for the U.S. and Great Britain are positive for all age groups and rising above 5 percent after age 40, the median savings rates for Germany are in most cases negative for ages below age 55.

In the United States 18 U.S. states took some action toward investigating the need for, and the possibility of introducing, CHI. For 1917–19, I calculate median savings rate by age group for the subset of States that I could identify as having had a CHI Commission between 1915 and 1920. Table 5 shows that compared to the national sample, these Commission states had lower median savings rates for households headed by men under age 45, but higher savings rates for households with heads over age 45. This difference can explain why these states showed interest in CHI, but the levels of the savings rates in these states show small need for CHI.

Jacobs (2002) describes the campaign for CHI in New York as the movement’s “beach head”.75 The push of legislation was strongest and the development towards the introduction of CHI was greater than in the other states and when the movement failed in New York, the movement failed for all states.76 The question arises whether savings rates are useful for understanding why New York was the beach head. The CHI movement in New York was principally a New York City movement. It has been argued that much of the opposition from doctors came from up-state New York. Was it the case of a demand for CHI in New York City but the not for the state overall? Table 5 shows

75 Concerning the failure of the CHI movement in New York, Jacobs (2002) asks “why did no state enact a compulsory government health insurance program that could serve as a beachhead for further emulation by other states and the national government?”
savings rates by five-year age groups for New York City and for New York State (including NYC) for 1917-1919. The table shows that at the time that the AALL CHI movement was in full force, New York City evidenced a lower savings rate for household heads aged 35 to 49 — the age at which the incidence and duration of illness began to rise. This was not the case for the rest of New York state or for the U.S. overall so this does go some of the way to explaining the AALL targeting of New York and why the movement got as far as it did. The AALL had identified a population that potentially would have benefited from CHI but its miscalculation appears to have been from assuming that the economic condition of wage-workers in New York City was representative of wage-workers in other industrial states and cities.

7. Conclusions

Compulsory Health Insurance was rejected in North America because not enough American workers expected to benefit from it to generate the necessary political support. In this early period, the costs of sickness were frequent but manageable for most wage-earners through voluntary insurance contracts and self-insurance. As Weaver (1983, 295 and 300) argues, the need for social insurance in the U.S. must not have been strong and this is a logical explanation for the lack of political action towards the enactment of social insurance legislation.

The rejection of CHI before 1930 should not be considered a policy failure, nor should it be interpreted as significant for explaining the lack of government health insurance in the United States today. Continuing to perpetuate the view of institutional and ideological American exceptionalism limits our understanding of American social policy development. Rodgers (1998, 255) argues that social insurance was only one of

many competing social policies that was being proposed in the north Atlantic economy by 1914 so concluding that the U.S. was a social policy failure because of its lack of compulsory-state-social insurance overlooks the abundance of social policy initiatives. Engel (2002) suggests that in the 1930s, while Americans did not seem particularly enthusiastic about compulsory health insurance, Americans were supportive of subsidies for medical care for poor Americans. As Thomasson (2002) and Beland and Hacker (2004) observe, the U.S. has used tax incentives to encourage the expansion private health insurance provided through the workplace and then to reserve public insurance coverage for the poor and the aged. This work also suggests that should the extent of health insurance coverage fall in the U.S., or if the cost of voluntary coverage increases, Americans could support a move to national-health insurance.
References


<table>
<thead>
<tr>
<th></th>
<th>Log(Claim Rate)</th>
<th>Log(Weeks Sick)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.0019</td>
<td>-0.00013</td>
</tr>
<tr>
<td></td>
<td>(0.011)</td>
<td>(0.0085)</td>
</tr>
<tr>
<td>Age-Squared</td>
<td>0.00035*</td>
<td>0.00025*</td>
</tr>
<tr>
<td></td>
<td>(0.0001)</td>
<td>(0.000093)</td>
</tr>
<tr>
<td>Constant</td>
<td>-2.675</td>
<td>1.114*</td>
</tr>
<tr>
<td></td>
<td>(0.228)</td>
<td>(0.18)</td>
</tr>
<tr>
<td>R-Squared</td>
<td>0.79</td>
<td>0.72</td>
</tr>
<tr>
<td>n</td>
<td>150</td>
<td>150</td>
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</table>

NOTES: Models are estimated by OLS using data for single years of age for ages 21 to 70 for the years 1896, 1897 and 1898. The dependent variables are the logarithm of the number of Ontario Odd Fellows of a given age in receipt of cash benefits divided by the number of members in good standing at that age, and the logarithm of total weeks of sickness benefits paid for members of a given age, divided by the number of members at that age in receipt of cash benefits. Year dummies were included in each of the estimations. The Tables with the data are published in the IOOF Grand Lodge of Ontario Journal of Proceedings for 1897, 1898 and 1898. Standard Errors are in Parentheses and * indicates significant at size 0.05. The detailed data are available in Appendix 1.
TABLE 2: Expected Incidence of Compensated Sickness and Expected Duration of Compensated Sickness by Age Group from IOOF Ontario Grand Lodge Data

<table>
<thead>
<tr>
<th>Age</th>
<th>Expected Claim Rate</th>
<th>Expected Claim Duration (Weeks)</th>
<th>Expected Sickness Duration (Weeks)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
</tr>
<tr>
<td>Over 20</td>
<td>0.15</td>
<td>5.72</td>
<td>0.88</td>
</tr>
<tr>
<td>20-24</td>
<td>0.09</td>
<td>3.91</td>
<td>0.33</td>
</tr>
<tr>
<td>25-29</td>
<td>0.09</td>
<td>4.15</td>
<td>0.39</td>
</tr>
<tr>
<td>30-34</td>
<td>0.11</td>
<td>4.47</td>
<td>0.47</td>
</tr>
<tr>
<td>35-39</td>
<td>0.12</td>
<td>4.86</td>
<td>0.58</td>
</tr>
<tr>
<td>40-44</td>
<td>0.14</td>
<td>5.36</td>
<td>0.75</td>
</tr>
<tr>
<td>45-49</td>
<td>0.17</td>
<td>5.98</td>
<td>0.99</td>
</tr>
<tr>
<td>50-54</td>
<td>0.20</td>
<td>6.76</td>
<td>1.34</td>
</tr>
<tr>
<td>55-59</td>
<td>0.24</td>
<td>7.73</td>
<td>1.88</td>
</tr>
<tr>
<td>60+</td>
<td>0.30</td>
<td>8.96</td>
<td>2.72</td>
</tr>
</tbody>
</table>

NOTES: The expected claim rate and duration are the exponentials of the fitted values generated by the estimated equations in Table 1. For the age group reported, the fitted value reflects the mid-point of the age-range. For the over-20 category, the fitted values are for an age of 45, and for 60+, an age of 62. The expected sickness duration in column (3) is the product of columns (1) and (2).
TABLE 3: Expected Contributions and Cash Benefits of Compulsory and Voluntary Health Insurance Plans

<table>
<thead>
<tr>
<th>Age</th>
<th>Sickness Duration (Weeks)</th>
<th>Annual Earnings</th>
<th>CHI Contributions</th>
<th>IOOF Dues</th>
<th>AALL CHI Cash Benefits</th>
<th>IOOF Cash Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>High 4%</td>
<td>Low 1.6%</td>
<td>3%</td>
<td>Flat Fee</td>
</tr>
<tr>
<td>Over 20</td>
<td>0.88</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>Over 20</td>
<td>0.88</td>
<td>$1,200</td>
<td>$48</td>
<td>$19</td>
<td>$36</td>
<td>$6</td>
</tr>
<tr>
<td>20-24</td>
<td>0.33</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>25-29</td>
<td>0.39</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>30-34</td>
<td>0.47</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>35-39</td>
<td>0.58</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>40-44</td>
<td>0.75</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>45-49</td>
<td>0.99</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>50-54</td>
<td>1.34</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>55-59</td>
<td>1.88</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
<tr>
<td>60+</td>
<td>2.72</td>
<td>$600</td>
<td>$24</td>
<td>$10</td>
<td>$18</td>
<td>$6</td>
</tr>
</tbody>
</table>

NOTES: Sickness Duration is the expected sickness duration from Table 2. Three CHI contribution rates are used. 4% assumes that the wage-earner paid the full proposed cost while 1.6% assumes that the AALL plan of wage-earners paying only 40% of the insurance cost was in place. The 3% of income contribution rate is my estimate of the cost of the CHI program with the medical benefits removed which makes the CHI and IOOF contracts more comparable. For the British National Health Insurance planning, it was estimated that the cost of providing medical benefits would account for 20% to 25% of the total insurance cost (Gilbert 1966, 349). For the expected value of cash benefits, I multiply the expected sickness duration by the value of the weekly cash sickness benefit. The weekly wage that I use is annual income divided by 52. I also use $8 per week which was proposed as part of 1918 Bill in New York (Numbers 1978, 81).
TABLE 4: Ratios of Expected Benefits to Premium Costs for Compulsory and Voluntary Health Insurance

<table>
<thead>
<tr>
<th>Cash Benefit</th>
<th>Annual Income</th>
<th>IOOF</th>
<th>2/3 of weekly wage</th>
<th>CHI</th>
<th>$8/wk</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>$3/wk</td>
<td>4%</td>
<td>1.6%</td>
<td>3%</td>
<td>4%</td>
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<tr>
<td>Cost</td>
<td>$5/year</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Over 20</td>
<td>$600</td>
<td>0.44</td>
<td>0.28</td>
<td>0.71</td>
<td>0.38</td>
</tr>
<tr>
<td></td>
<td>$1200</td>
<td>0.44</td>
<td>0.28</td>
<td>0.71</td>
<td>0.38</td>
</tr>
<tr>
<td>20-24</td>
<td>$600</td>
<td>0.17</td>
<td>0.11</td>
<td>0.27</td>
<td>0.14</td>
</tr>
<tr>
<td>25-29</td>
<td>$600</td>
<td>0.20</td>
<td>0.13</td>
<td>0.31</td>
<td>0.17</td>
</tr>
<tr>
<td>30-34</td>
<td>$600</td>
<td>0.24</td>
<td>0.15</td>
<td>0.38</td>
<td>0.20</td>
</tr>
<tr>
<td>35-39</td>
<td>$600</td>
<td>0.29</td>
<td>0.19</td>
<td>0.47</td>
<td>0.25</td>
</tr>
<tr>
<td>40-44</td>
<td>$600</td>
<td>0.37</td>
<td>0.24</td>
<td>0.60</td>
<td>0.32</td>
</tr>
<tr>
<td>45-49</td>
<td>$600</td>
<td>0.49</td>
<td>0.32</td>
<td>0.80</td>
<td>0.42</td>
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<tr>
<td>50-54</td>
<td>$600</td>
<td>0.67</td>
<td>0.43</td>
<td>1.08</td>
<td>0.58</td>
</tr>
<tr>
<td>55-59</td>
<td>$600</td>
<td>0.94</td>
<td>0.61</td>
<td>1.52</td>
<td>0.81</td>
</tr>
<tr>
<td>60+</td>
<td>$600</td>
<td>1.36</td>
<td>0.88</td>
<td>2.19</td>
<td>1.17</td>
</tr>
</tbody>
</table>

NOTES: The values in this table divide the expected cash benefits by the dollar contributions paid according to Table 3. The higher the number, the more benefit expected per dollar of contribution.
### TABLE 5: Median Savings Rates for US Households, 1888-90 and 1917-19

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
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<tr>
<td></td>
<td>n</td>
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<td>with</td>
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<tr>
<td></td>
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<tr>
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<td>0.6%</td>
<td>0.8%</td>
<td>3.9%</td>
<td>3.3%</td>
<td>5.0%</td>
<td>4.6%</td>
</tr>
<tr>
<td>25-29</td>
<td>0.8%</td>
<td>2.8%</td>
<td>4.6%</td>
<td>3.8%</td>
<td>5.4%</td>
<td>4.6%</td>
</tr>
<tr>
<td>30-34</td>
<td>0.9%</td>
<td>2.1%</td>
<td>5.2%</td>
<td>4.1%</td>
<td>5.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>35-39</td>
<td>1.1%</td>
<td>2.7%</td>
<td>5.1%</td>
<td>4.0%</td>
<td>5.9%</td>
<td>4.8%</td>
</tr>
<tr>
<td>40-44</td>
<td>1.4%</td>
<td>5.2%</td>
<td>5.6%</td>
<td>4.4%</td>
<td>6.2%</td>
<td>5.1%</td>
</tr>
<tr>
<td>45-49</td>
<td>1.9%</td>
<td>8.7%</td>
<td>6.1%</td>
<td>5.2%</td>
<td>7.1%</td>
<td>6.0%</td>
</tr>
<tr>
<td>50-54</td>
<td>2.6%</td>
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<td>7.7%</td>
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</tr>
<tr>
<td>60+</td>
<td>5.2%</td>
<td>10.4%</td>
<td>9.4%</td>
<td>8.4%</td>
<td>11.3%</td>
<td>9.4%</td>
</tr>
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</table>

**NOTES:** The surplus measure is total household income less total expenditures reported. The surplus is divided by the husband’s income to calculate the savings rate. The median savings rate was determined and reported in this Table. For 1917-19, the surplus measure was calculated with and without mortgage payments included in the total expenditures. The surplus measures were also calculated with, and without, households with 0 surplus included in the calculations. The reason for doing this is that the 0 surplus could indicate no savings or dis-savings, but also missing values. Commission States are the states identified by Lapp (1920); Massachusetts (1917 and 1918), California (1917 and 1919), New Jersey (1918), Ohio (1919) and New York (1919), Connecticut (1919), Wisconsin (1919), and Illinois (1919).
TABLE 6: Median Incomes, Surpluses, Sickness and Death Expenditures and Savings Rates for U.S. and European Households, 1888-90

<table>
<thead>
<tr>
<th></th>
<th>Number of Obs</th>
<th>Total Income ($)</th>
<th>Husband's income ($)</th>
<th>Husband's Income to Total Income</th>
<th>Household Surplus ($)</th>
<th>Sickness and Death Expenses ($)</th>
<th>Surplus/Total Income</th>
<th>Surplus/Husband's Income</th>
<th>Sickness and Death Expenses/Husband's Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Germany</td>
<td>142</td>
<td>272</td>
<td>225</td>
<td>0.83</td>
<td>-0.23</td>
<td>3.75</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.017</td>
</tr>
<tr>
<td>Belgium</td>
<td>104</td>
<td>339</td>
<td>211</td>
<td>0.62</td>
<td>-0.30</td>
<td>1.93</td>
<td>-0.001</td>
<td>-0.001</td>
<td>0.009</td>
</tr>
<tr>
<td>France</td>
<td>319</td>
<td>345</td>
<td>241</td>
<td>0.70</td>
<td>11.73</td>
<td>0.68</td>
<td>0.034</td>
<td>0.049</td>
<td>0.003</td>
</tr>
<tr>
<td>Great Britain</td>
<td>1001</td>
<td>462</td>
<td>370</td>
<td>0.80</td>
<td>16.31</td>
<td>2.43</td>
<td>0.035</td>
<td>0.044</td>
<td>0.007</td>
</tr>
<tr>
<td>Switzerland</td>
<td>52</td>
<td>340</td>
<td>181</td>
<td>0.53</td>
<td>9.15</td>
<td>7.72</td>
<td>0.027</td>
<td>0.051</td>
<td>0.043</td>
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<tr>
<td>U.S.</td>
<td>5608</td>
<td>572</td>
<td>448</td>
<td>0.78</td>
<td>9.68</td>
<td>12.00</td>
<td>0.017</td>
<td>0.022</td>
<td>0.027</td>
</tr>
</tbody>
</table>

NOTES: Observations with missing values for income or expenditures have been dropped from the set of observations used to calculate median values. All incomes and expenditures are reported in the 1888-1890 survey as U.S. dollars. Values denominated in national currencies were converted to U.S. dollars using exchange rates between the currency and U.S. dollars.
<table>
<thead>
<tr>
<th></th>
<th>US</th>
<th>n</th>
<th>GB</th>
<th>n</th>
<th>GERMANY</th>
<th>FRANCE</th>
<th>n</th>
<th>SWITZ</th>
<th>n</th>
<th>BELGIUM</th>
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</thead>
<tbody>
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NOTES: See notes for Table 5.
The national political leaders of the Progressive Era included Theodore Roosevelt, Robert M. La Follette Sr., Charles Evans Hughes, and Herbert Hoover on the Republican side, and William Jennings Bryan, Woodrow Wilson, and Al Smith on the Democratic side. Theodore Roosevelt is often cited as the first Progressive president, known for his trust-busting activities. Progressives did little for civil rights or the plight of African Americans in the aftermath of Reconstruction, as the Supreme Court affirmed the constitutionality of many racist southern laws. Key Terms: The Varieties of Progressivism. Progressive-Era reformers sought to use the federal government to make sweeping changes in politics, education, economics, and society. Learning Objectives.