

NORTH-HOLLAND

Journal of Income Distribution 9 (2000) 5-9

JOURNAL OF INCOME DISTRIBUTION

Early inequality and industrialization Introduction

Peter H. Lindert*

Department of Economics, University of California-Davis, One Shields Avenue, Davis, CA 95616, USA

Abstract

Seeking to enrich our understanding of inequality movements, economic historians have used new data to illuminate the earlier darkness that Kuznets urged us to explore. To explore earlier worlds without income tax returns or modern household surveys, they have turned to non-income measures of purchasing power and well-being. The articles in this issue give a good sampling from this new wave of the economic history of inequality. © 2000 Elsevier Science Inc. All rights reserved.

JEL classification: I3; N3

Keywords: Income inequality; Wealth inequality; History of inequality

Seeking to enrich our understanding of inequality movements, economic historians have used new data to illuminate the earlier darkness that Kuznets' (1955) famous Presidential Address urged us to explore. To explore earlier worlds without income tax returns or modern household surveys, they have turned to non-income measures of purchasing power and wellbeing. The articles in this issue give a good sampling from this new wave of the economic history of inequality, in the form of six articles from the XIIth International Economic History Congress, held in Madrid in August 1998.¹ They shed new light on patterns and conceptual issues that fit Kuznets' overall approach but not his famous inverted-U hypothesis:

1. Yes, there were early rises in the inequality of incomes, wealth, and some dimensions of health in many countries.

^{*} Corresponding author. Tel.: +1-530-752-1983; fax: +1-530-752-5611.

E-mail address: phlindert@ucdavis.edu (P.H. Lindert).

¹ Other articles prepared for the same IEHA Congress, but not presented here are: J.P. Smits and J.L. van Zanden, "Industrialization and Income Inequality in the Netherlands 1800–1914"; L. Borodkin and T. Valetov, "Modeling Wage Inequality in Russian Industries: 1880–1914"; and J.G. Williamson, "Globalization and Inequality, Past and Present," Harvard University.

- 2. No, these did not correspond with industrialization, nor were they caused by it.² The contexts of rising inequality did not match the classic Industrial Revolution periods, as Kuznets thought they might. To explain their timing, one must give demographic and other variables a greater role, a likelihood better reflected in Kuznets' later writings than in his classic address.
- 3. By being forced to explore non-income evidence, the economic historians have opened up conceptual issues that the traditional focus on income inequality has yet to incorporate in a satisfactory way. One must choose between studying the inequality of incomes that politics could redistribute and studying the inequality of true well-being. In pursuing their study of "living standards," the economic historians have come to the same dissatisfaction with the income concept that welfare theorists (e.g. Slesnick, 1998) have recently expressed.
- 4. The inequality trends in nominal income and wealth—in the resources that the political process can redistribute—are very different from the inequality trends in true well-being or "living standards." In this parting of the trends, the history of inequality resembles the divergence of trends in average income and average health.

The articles in this special issue capture these points, both when they try to use non-income measures to comment on income inequality trends and when they consciously set aside nominal-income measures in pursuit of the deeper concept of inequality in "living standards."

1. Indirect light on the history of income inequality

Four of the articles in this issue use inequality of occupational earnings, non-human wealth, and the famous political arithmetic of Gregory King and others as indirect clues to trends in income inequality. While they explore different historical contexts, they tend to find a consistent pattern: *Most historical movements in income/wealth inequality reflect movements in the upper half of the ranks*.

John James and Mark Thomas confirm this tendency by adding new data and a new overview to the debate over wage inequality in nineteenth-century America. They find no trend in several measures of occupational wage dispersions. Since they share the prevailing suspicion that the overall income inequality must have risen sometime between American Independence and World War I, they note that either the rise occurred only at the end of the eighteenth century and the start of the twentieth or the long nineteenth-century rise was, in fact, a rise of higher and more property-based income relative to workers' earnings.

Martin Shanahan and Margaret Corell also find most of the action in the upper half of the ranks, in this case, in the upper half of the American wealth ranks between 1774 and

² In this distinction between periods of early modern rises in inequality and the period of Industrial Revolution, the present articles are preceded by van Zanden (1995).

1860. Taking advantage of the IPUMS set of U.S. census samples, they find the extent to which the apparent rise in wealth inequality between 1774 and 1860 was due to a true change as opposed to a change in sample composition. It turns out that about half the apparent change in wealth gini is a result of changes in the measurement base and about half is a true change in wealth gini—again, a change concentrated in the upper half of the ranks.

Michael Pammer's study of wealth inequality in Austria between 1820 and 1913 similarly shows that the main movements are in the upper half of the ranks. Taking advantage of the fact that Austrian law required probates (or certification of zero wealth at death) for the whole decedent population, Pammer decomposes the slight rise in wealth gini into intra-occupational gini movements, movements in group means, and compositional effects. The compositional effects, mainly the shift out of agriculture, explain about 100 percent of the observed rise in the overall gini. While the shift out of agriculture may seem unrelated to the movement-at-the-top theme suggested here, there is indeed a link: In the Austrian setting, as in so much of Europe in the later nineteenth century, the decline of agriculture meant a relative decline in the wealth of the landed ("Privat" decedents in the Pammer study) and a relative rise of entrepreneurs and top-income non-agricultural professionals. The rise of inequality may have been dampened in Austria in part by the same globalization of grain and other markets that raised inequality in America.³

Peter Lindert's article on British and American inequality also weaves together less conventional measures into an indirect look at movements of income inequality during early industrialization. These measures include those early "political arithmetic" guesses about Britain's income structure, wealth inequality measures, and measures of dispersion in labor earnings. The article also poses a tough conceptual problem: How are we to modify the usual nominal-shares approach to income inequality in a setting in which the cost of living moves very differently for the high- and low-income ranks? Britain went through such an experience in the late eighteenth and early nineteenth centuries. Soaring prices of staples created a greater rise in the inequality of real consumer well-being than in conventional nominal income inequality.

2. Health, heights, and the larger concept of living standards

The other reason that economic historians have pushed their study of growth and inequality beyond the usual income measures is that they find annual income, or even annual consumption, far too narrow a concept to represent well-being or living standards. Even if we had perfect measures of annual income and could adjust them for those differential movements in the cost of living, they would not dominate the center of the stage in a balanced presentation of how well, or how unequally, people fared in the past. Income inequality relates to only one of two basic approaches to the inequality of well-being. The approach that

 $^{^{3}}$ If so, this would fit the transatlantic pattern of movements in relative factor prices emphasized by Williamson (1998).

gives center stage to income inequality follows our natural tendency to ask, "How unequal is the distribution of resources that the political process might try to redistribute?" This approach is a guaranteed political perennial. It does not, however, represent our larger curiosity about the inequality of people's overall well-being, including the parts that are not easily redistributed.

The broader approach to the advance, and the inequality, of living standards gives equal or greater billing to the length of life and to health. The relevance of the length of life is clear, even if one follows an income or consumption approach to inequality. The inequality in our lifetime income or consumption depends very much on how unequally we enjoy years of consumption, and not just on the level of consumption, or income, per year.⁴ It also depends on the quality of the health with which we live those years.

To reveal trends in the larger health and life expectancy side of true well-being, two of the articles in this issue use heights as available indicators of health and life expectancy. These shed light on the inequality of well-being both through the time-path of average heights and through the time-path of height inequality. Average heights are an indirect clue to the inequality of life expectancy, simply because a shorter population is one more stressed by disease environments and insufficiency of nutritional intake, a stress that makes people survive more unequally, especially in infancy.

Joerg Baten's article explicitly warns the non-historian that trends in health and survival are often the opposite of trends in income, whether one is studying average levels or dispersion. In ante-bellum America, in England during the Industrial Revolution, and in Bavaria between 1797 and 1839, periods of rising real wages and real incomes were often periods in which health and life expectancy deteriorated and became more unequal. Baten shows the rising inequality in health in Bavaria by exploiting height data in a setting where the whole population of young adult males was registered for conscription.

Gloria Quiroga and Sebastián Coll exploit the socio-occupational and regional data on heights for Spain between 1895 and 1950. While they consider using height and health inequality as a proxy for income inequality, they too find height trends that warn of possible divergence between income and other dimensions of well-being. True, the long rise in real GDP was mirrored by a rise in the average height of all major occupational groups. In this case, the movement of the averages does not show the puzzle of declining health cum rising average incomes, perhaps because this case comes from the twentieth century, when income growth was accompanied by revolutionary advances in health care and disease control, especially in the cities. Yet, Quiroga and Coll also find rising inequalities of heights, suggesting that we badly need a new history of income inequalities in Spain. Was this another puzzle case, with the rising height inequality accompanying a decline in income inequalities, or would still-untapped data show that there was a rise in income inequality?

⁴ For treatments of the length of life in the context of lifetime consumption, see Usher (1973), Lillard (1977), Williamson (1984), Lindert (1991, 213–214), and Jackson (1994).

3. The Kuznets curve as an appetizer

The current wave of research on the economic history of inequality signals a change in the role to be played by the inverted-U Kuznets curve of inequality. It seems fair to say that economic historians of inequality still find the Kuznets curve idea a stimulating food for thought, but one that should be served before the main course. In the main course they invariably discover long spells of rising and falling inequality that deny the existence of a single rise and fall over the course of economic development. Explaining those episodes also calls for a richer variety of causal ingredients than Kuznets mentioned, though his writings did explore a number of causal forces. If the articles presented here are typical, the Kuznets curve idea will continue to stimulate authors who repeatedly go beyond it to richer explanations of inequality movements.

References

Jackson, R. V. (1994). Inequality of incomes and lifespans in England since 1688. *Econ Hist Rev* 47, 508–524. Kuznets, S. (1955). Economic growth and income inequality. *Am Econ Rev* 45, 1–28.

Lillard, L. A. (1977). Inequality: Earnings vs. human wealth. Am Econ Rev 67, 42-53.

Lindert, P. H. (1991). Toward a comparative history of income and wealth inequality. In Y. S. Brenner, H. Kaelble, & M. Thomas (Eds.), *Income Distribution in Historical Perspective* (pp. 212–231). Cambridge: Cambridge University Press.

Slesnick, D. T. (1998). Empirical approaches to the measurement of welfare. J Econ Lit 36, 2108–2165.

Usher, D. (1973). An imputation to the measure of economic growth for changes in life expectancy. In M. Moss (Ed.), *The Measurement of Economic and Social Performance*. New York: Columbia University Press.

van Zanden, J.-L. (1995). Tracing the beginning of the Kuznets curve: Western Europe during the early modern period. *Econ Hist Rev 48*, 643–664.

Williamson, J. G. (1984). British mortality and the value of life. Popul Stud 38, 157-172.

Williamson, J. G. (1998). Globalization, labor markets, and policy backlash in the past. J Econ Perspect, 51-72.