
CONFERENCE REPORTS

*Aspect of Modern Growth: A Report of the Economic History Association Meeting**

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The diverse topic "Aspects of Modern Growth" was the theme of the thirty-fifth annual meeting of the Economic History Association. In keeping with the wide range of the topic, the papers presented dealt with demographic responses to growth, labour force formation, productivity change in agriculture, wealth concentration, the role of entrepreneurs, and international monetary and commodity flows. Prior to the delivery of the papers, however, workshops were held where participants discussed their current research interests and problems. Six concurrent two hour sessions were held in the following areas: Government Finance, Taxation, and Economic Policy in Old Regime Europe, chaired by David Ringrose of the University of California at San Diego; Land Tenure Patterns and Property Rights in Agriculture, chaired by Joseph D. Reid, Jr. of the University of Chicago and Ben Baack of Ohio State University; Growth and Welfare in the American Colonies, chaired by Richard Bean of the University of Houston; Frontiers in Canadian Economic History, chaired by Trevor Dick of the University of Toronto; Economic of Scale in American Nineteenth Century Economic Growth, chaired by Thomas J. Weiss of the University of Kansas; and History of Underdevelopment in the Third World, chaired by Dennis McCarthy of Iowa State University. Following these workshops, the formal presentations began.

Richard Easterlin of the University of Pennsylvania gave the first paper, "Population Change and Farm Settlement in the American North". His central concern was the cause of a long-term decline in farm population fertility.

* Chicago, September 18-20, 1975.

In the six states studied from 1790 to 1930 (New Hampshire, New York, Ohio, Illinois, Iowa, and Nebraska) he observed a steady fall in the number of births. After rejecting several possible explanations, Easterlin offered a "bequest" model as a way of understanding the fertility decline. This model centred on the concern of an American farmer to give his children property or a cash payment as a start in life at least equal to what the farmer had received from his father. Accordingly, the number of children he could "afford" depended upon the prospects for future capital gains to add to his wealth. Census data was then provided to show the growth of the value of farm capital in time and space, and the pattern was consistent in all areas: rapid increases in the early stages of development and declines in the later stages. As a result, farmers could anticipate a rapid rise in their wealth position during the early period of settlement. This would make them optimistic about their ability to give their offspring the proper start in life, and the number of births would be high. On the other hand, as the area aged the prospective rate of return would fall, reducing the growth in wealth and the farmer's ability to assist his children. This decline in prospective returns led to a reduction in fertility, and this Easterlin argued was the basic source of the observed fertility pattern.

Allan Bogue of the University of Wisconsin criticized the "bequest" model, saying that more historical research was necessary to determine the motivation behind fertility behaviour. In particular, he stressed the need for more inheritance studies to determine how property was passed from generation to generation and the percent of farmers affected. He was also sceptical about other aspects of this hypothesis. For example, given the fluctuating nature of farm values, the Easterlin model required that the farmer sees the movement of land values too well in assessing his ability to provide for children.

The second paper of the session, presented by Thomas Terrill of the University of South Carolina, was « Eager Hands: Labor for Southern Textiles 1850-1860 ». Terrill's work was a microstudy of labour migration patterns and incentives in a South Carolina county. Using manuscript census data for 1850 and 1860 as well as textile company records, he sought to outline the shift from slave to white labour during the textile boom of the period. He argued that changes in relative wage rates explained the shift with mill owners turning to the labour of small white farmers and their families as slave prices rose. The white farmers had an incentive to become textile labourers because they had uncertain incomes that could be supplemented by work in the mills, especially by the women and children. There were, however, high information costs with poor whites often unaware of the new employment possibilities. Accordingly, one firm at least, the Graniteville Company, engaged in an extensive advertisement campaign to attract workers. Terrill indicated that while money wages were apparently low, they were

augmented by subsidized housing for the family and education for the children. In spite of these incentives there was a high labour turnover rate in the mills which Terrill could not explain.

Howard Gitelman of Adelphi University discussed Terrill's findings, relating them to his own research on the Waltham textile mills in Massachusetts. He indicated that southern firms studied those in the North for labour recruitment and management techniques, but that the high turnover observed by Terrill remained a problem, lowering productivity. Gitelman argued, however, that labour force availability and productivity may not have been the crucial factor in the decline of southern textile mills in the late 1850's. Rather, other variables such as access to capital may have been more important.

The second session of the economic history meetings focused on the topic of production and wealth concentration with three related papers presented. The first was «Eighteenth Century Agricultural Productivity Changes in the Middle Atlantic Region» by Duane E. Ball of the University of Michigan and Gary Walton of the University of California at Berkeley. The central concern of the paper was on the nature of per capita income growth in the region from 1714 to 1790. The sample data used were from Ball's study of Chester County Pennsylvania.¹ Since agriculture was the dominant source of income during the period, Ball and Walton focused on total factor productivity change in agriculture as a means of determining the probable movement of income. Using Chester County tax lists and probate records they assembled factor input and total output indexes for 1714 to 1790. The resulting factor indexes were as follows: the land index remained nearly constant, while that for capital grew between 20% and 25% and that for labour fell slightly. As a result, the combined, weighted-total factor index fell from 100 to 94 during the period. The movement of the total output index was more erratic, rising from 100 to 105 by the end of the Colonial period and dropping to 95 during the post-revolutionary years. By dividing the output index by the weighted-input index for each year, Ball and Walton computed a total factor productivity index which rose slowly from 1714 until the revolution and then declined slightly to 1790. For the years under study the rate of productivity change in agriculture was .1%. On the basis of the finding, the authors concluded that incomes were relatively constant during the eighteenth century and that the subsequent growth in agricultural productivity and income, observed by other economic historians, must have had its beginnings in the nineteenth century.²

¹ See DUANE E. BALL, *The process of Settlement in Eighteenth-Century Chester County Pennsylvania: A Social and Economic History*, unpublished Ph.D. dissertation, University of Pennsylvania, Philadelphia, Pa., 1974.

² For discussions of early American economic growth see PAUL DAVID, *The Growth of Real Product in the United States*, «Journal of Economic History» (June, 1967).

Russell Menard of the Institute of Early American History and Culture reviewed the Ball and Walton study. He criticized them for failing to describe in detail the procedure used for constructing the indices. Without that information the full value of the measures could not be evaluated. He also charged that due to the use of faculty data regarding family size, Ball and Walton overestimated the rate of decline in labour input in the early years and underestimated it for the period after the revolution. The effect of this was to bias the rate of change of the productivity index downward, making the performance of the economy appear worse than it was. Menard then offered his own research findings on New England and the Chesapeake which indicated higher rates of growth from 1700 to the revolution than those shown by Ball and Walton.

The inheritance theme introduced by Easterlin the previous day was continued in the second paper of the session by David Gagan of McMaster University, « Patterns of Inheritance in Nineteenth Century Rural Ontario ». Using probate records for 1500 estates from 1840 to 1890 for a rural county in Ontario, Gagan studied the nature and effects of the transmission of land ownership from generation to generation. He found that in regard to bequests farmers had conflicting desires. On the one hand they had wanted to maintain their farms intact after their death. On the other hand they wanted to leave nearly equal portions of their wealth to their children, especially males. Accordingly, the most common inheritance practice was for the farmer to designate a principal heir who received the farm. The principal heir was then required to mortgage the land to make cash payments to the other heirs. This system of wealth transmission Gagan asserted had high private and social costs. To obtain the land the principal heir was forced to endure a long, dependent apprenticeship period until the farmer died. Upon assuming control of the land he was burdened with the mortgage debt necessary for paying the other heirs. Socially, the system perpetuated a high land/man ratio which led to outmigration of labour resources from Ontario to the United States.

R. Marvin McInnis of Queen University responded to this negative conclusion by arguing that the inheritance mode did not have a major impact on the Ontario economy. Gagan's micro-approach missed the impact of other factors in the macro-economy. The lack of non-agricultural employment, rather than the inheritance system was the chief source of immigration pressure. In addition, McInnis doubted the magnitude of the private costs cited in the study. He stated that the system probably had little effect on the borrowing behaviour of farmers, since they regularly mortgaged their farms for other reasons such as expansion and capital investment.

pp. 151-197. DOUGLASS NORTH, *The Economic Growth of the United States, 1790-1860* (New York: Norton, 1966).

The transmission of wealth was also the focus of Stanley Lebergott's paper « Long Term Trends in United States Wealth Concentration ». Using published data from probate and tax records for the United States for the past 150 years, Lebergott sought to evaluate the ability of members of the richest one percent of the population to maintain control over their wealth. Using 30-years intervals he calculated their hypothetical wealth position with perfect retention and an 8% rate of return on their assets. He then compared the hypothetical wealth position with the actual one. The calculated holdings were much larger than the actual, indicating a retention rate of less than one. In addition, the composition of the richest one percent changed, implying social mobility in and out of that class. Lebergott asserted that the family was the source of the low retention rate and that the rate was negatively related to the number of members in the family. Upon the death of the owner the wealth was partitioned among the survivors, who in almost all cases dissipated it. On the basis of his research he concluded that the rich were not getting richer, but that, in fact, the wealth concentration in the United States had been declining since before the turn of this century.

Lee Soltow of Ohio University was reluctant to fully accept Lebergott's conclusion pointing to internal revenue records to the 1960's which did not show wealth dissipation. He argued that more demographic studies at the micro-level were necessary to determine the relationship between fertility and wealth and to ascertain the ability of rich families to maintain their position.

A special topic "Entrepreneurs and Finance" was discussed in honour of Herman E. Krooss.³ The major paper of this session was "Forgotten Men of Money: Private Bankers in Early United States History" by Richard Sylla of North Carolina State University. The aim of Sylla's work was to show that private banking in the American economy was more extensive and had a greater impact on the money supply than previously suspected. In that respect he argued American banking was similar to that in England. Indirect evidence on the extent of private banking was obtained by observing the large number of bank charter applications after states passed acts restricting private bank operations. Presumably, those applications came from individuals who had been private bankers. Using direct evidence for the 1850's from the *Report of the Secretary of the Treasury*, 1856 and the *Bankers Almanac*, 1851-1853, Sylla attempted to estimate the number of private bankers operating at that time. He concluded that for the 1850's one third or more of all banks were private and one fourth of all bank capital was private. On this basis, Sylla agreed that the magnitude of the private banking sector required that its impact on the money supply be evaluated. Studies which

³ See HERMAN E. KROSS, *Executive Opinion* (Garden City New York: Doubleday, 1970).

neglect it such as Temin's and Sushka's may have underestimated the money supply and overestimated the velocity of circulation.⁴

Lance Davis of the California Institute of Technology was sceptical about the influence of private banking on the money supply and velocity, arguing that it would have to have been large relative to the chartered sector to have much effect. He called for more research to gauge its magnitude.

The final session of the economic history meetings discussed the pattern of international flows during growth. Robert Eagly of the Federal Reserve Bank of New York and V. Kerry Smith of the State University of New York at Binghamton presented a paper « Interest Rate Arbitrage in the Eighteenth Century » which dealt with the degree of integration between London and Amsterdam money markets 1731 to 1789. The hypothesis tested was that the English domestic and international money markets became more integrated over the period. Interest rates observed were the Amsterdam discount rate on sixty-day bills, London short-term bill rates, London long-term bond rates, and London East India bond rates. Spectral analysis and cross spectral analysis were used to determine the strength of association between interest rates in both markets. The spectral analysis indicated that for the domestic market seasonal effects were small for short-term rates and large for long-term ones. The cross spectral analysis showed that the two markets were closely integrated after 1764 and perhaps before. The three London interest rates moved more closely with the Amsterdam discount rate as time passed from 1731 to 1789. Another finding was that the three London rates were associated earlier and stronger with the Amsterdam rate than among themselves, strong evidence for the importance of the foreign sector, especially Dutch holdings, in the English economy.

The final paper presented was « Factor and Commodity Flows in the International Economy 1870 to 1914: A Multi-Country View » by Alan Green and M.C. Urquhart of Queens University. This paper presented selected findings from a massive macrostudy of international flows by Green and Urquhart. Principally interested in migration pattern, they focussed on the impact of those movements on population growth and labour force formation in both sending and receiving countries. They found that high female participation rates in sending countries helped to maintain the labour input. The effect of migration on domestic capital formation (saving rates) was also outlined. Migration tended to increase savings rates in receiving countries such as the United States and Australia. Savings rates, however, were maintained in most sending countries studied because of high rates of natural population increase.

⁴ See PETER TEMIN, *The Jacksonian Economy* (New York: Norton, 1969). MARIE SUSHKA, *An Economic Model of the Money Market in the United States, 1823-1859*, unpublished paper, Board of Governors, Federal Reserve Board, Washington, D.C., 1974.

The diverse nature of the papers presented at the economic history meetings reflected the complexity of modern economic growth. The quality of the papers discussed was high, however, indicating the intense scholarly effort underway to understand the nature of that growth. The often heated discussions that occurred showed that much is left to be done both in the areas of theory development and research. The works discussed by the members of the Economic History Association were offered as partial explanations, but as Simon Kuznets has said those are « but indispensable steps toward an increasingly realistic view of modern economic growth and a better appreciation of the important questions to be asked — with the hope that they may eventually be answered ».⁵

⁵ SIMON KUZNETS, *Modern Economic Growth* (New Haven: Yale University Press, 1967), p. 33.

