## Comptes rendus — Book Reviews

Ansley J. Coale and Susan Cotts Watkins, (eds.) — *The Decline of Fertility in Europe*. Princeton: Princeton University Press, 1986. Pp. xxii, 484.

Michael S. Teitelbaum — The British Fertility Decline: Demographic Transition in the Crucible of the Industrial Revolution. Princeton: Princeton University Press, 1984. Pp. xv, 269.

Demographers have recently used the concept of the "second demographic transition" in analyzing Europe's plunge in fertility since 1965 to levels well below replacement. Such theorizing, however, is perhaps premature in that we have never fully understood the "first" demographic transition, roughly spanning the 1880s to the 1930s, which ushered in nothing short of a revolution by reducing marital fertility to levels unprecedented in past experience. The collection of essays edited by Ansley J. Coale and Susan Cotts Watkins and the monograph by Michael S. Teitelbaum attempt to rectify this situation and, in particular, to elucidate the timing of and reasons for the adoption of controlled family limitation which "spread like an epidemic across Europe, so that by 1930 very few provinces remained untouched" (Coale and Watkins, p. 431).

Both works are products of the Princeton European Fertility Project begun by Coale in 1963 at the Office of Population Research at Princeton. One of the most ambitious research efforts ever undertaken in historical demography, it aimed to study the decline of fertility within each of the more than six hundred provinces of Europe. Since inception, the project — with nearly twenty principal collaborators — has generated eight substantial volumes (three more are on the way) and numerous articles. The Decline of Fertility in Europe is the centre-piece of these publications containing the revised proceedings of a 1979 conference which Coale views as "a culmination although not a termination" (p. xix) of the entire research project.

The outstanding achievement of this work is the statistical legacy it leaves to current and future historians. In "A Summary of the Changing Distribution of Overall Fertility, Marital Fertility, and the Proportion Married in the Provinces of Europe" — the second of eleven chapters comprising almost a third of the book — Coale and Roy Treadway provide for each nation and province decennial indices of fertility and nuptiality from roughly 1870 to 1960 (see especially Appendix A, pp. 80-152). These measures, designed by the Princeton Project, are expressed as ratios in relation to maximum ever-recorded levels of fertility observed for Hutterites in the 1920s. Although not immune to distortions produced by varying age distributions (Appendix B, pp. 153-162) they represent an improvement on conventional indicators of fertility, serve well for purpose of standardized comparison, and are utilized in all monographs, including Teitelbaum's, produced by the project. This massive array of data is indeed significant. Historians of Europe will now have at their fingertips fertility profiles of any nation, region or province. Equally impressive are the visual representations of these statistics — the thirteen maps at the end of the volume and Coale's elliptical diagrams in Chapter 2.

What does this barrage of information tell us? Several major conclusions of a descriptive nature emerge for the post-1880 period (France, which experienced its fertility decline much earlier is excluded from such generalizations). First, it is unmistakenly the case that declines in overall fertility were produced by voluntary family limitation within marriage rather than by changes in nuptiality. In addition, it is clear that "once the decline in a province had begun, it almost always continued monotonically — that is, it was not reversed — until very low levels were reached" (p. 431). Perhaps the "most startling" conclusion is the rapidity with which declines in marital fertility spread. Finally, this "was a revolution accomplished with primitive technology" (p. 435); that is, with some mix of abortion, abstinence and withdrawal.

To describe trends is one thing. To explain them is another. It is in the latter realm that the volume falls somewhat short. To be sure, the quest for an overriding theory of the demographic transition is perhaps "illusory" (p. 257). Yet this is no excuse for the fact that many crucial themes either receive no attempt at explanation or often result in ambiguous conclusions which are not sufficiently reconciled.

Massimo Livi-Bacci, for example, does an admirable job in presenting patterns of early fertility decline among aristocracies, Jews and select urban populations ("Social-Group Forerunners of Fertility Control in Europe"). He leaves the reader in the final analysis, however, wondering what specific mechanisms motivated such groups to restrict family size. John Knodel's "Demographic Transitions in German Villages" presents the astounding fact that both males and females of the German rural proletariat, contrary to other findings, married later than all other occupational groups even businessmen and professionals (pp. 353-354). Yet he makes no attempt to explain this unique social pattern. At least one should credit Knodel for providing statistics pertaining to this important and expanding occupational group. It is unfortunate that the European Fertility Project as a whole did not collect data on rural occupational structure. Even where this is attempted for select countries by Ron Lestharge and Chris Wilson ("Modes of Production, Secularization, and the Pace of Fertility Decline in Western Europe, 1870-1930") the measures devised to specify the familial, labour-intensive mode of production are too crude to distinguish rural proletarian production from traditional cottage industry (p. 276). Perhaps a more serious flaw is the virtual neglect of migration as an explanatory factor influencing levels of fertility especially in light of Barbara Anderson's observation that the "selectivity of migration, whether geographical or in terms of group membership, can complicate any analysis of fertility differentials over time" ("Regional and Cultural Factors in the Decline of Marital Fertility in Europe," p. 309).

At times, explanation of certain causal variables are contradictory. This is particularly the case when various authors attempt to assess that shibboleth of traditional transition theory which cites declining infant mortality as a precipitant of falling marital fertility. Francine Van de Walle ("Infant Mortality and the European Demographic Transition") concludes that "no systematic causal relationship can be posited" (p. 231). Watkins in her concluding essay is likewise skeptical (p. 436). Knodel, however, using family reconstitution for his sample of German villages finds that for individual couples married after 1825 "participation in the early stages of the fertility transition was apparently enhanced by favorable child mortality experience" (p. 388). This finding is of considerable import, suggesting that the European Fertility Project's emphasis on infant mortality should shift to a consideration of child mortality. More importantly, it seems that different results can readily merge when using micro-level individual family data as opposed to macro-level aggregative statistics derived by and large from censuses. Since the Princeton project uses mainly the latter approach this poses the dilemma of whether aggregate level analysis permits sufficiently detailed examination of behavioural shifts relevant to the demographic transition. The only solution to such a problem would be to supplement provincial-wide statistics with a sample of family reconstitution studies. Although a daunting task, the effort would prove extremely worthwhile.

In spite of the above difficulties at the explanatory level one very powerful conclusion of vast significance for future work emerges from this volume; namely, the confirmation that cultural and regional factors may often be of more significance than the standard socio-economic or "modernization" variables (standard of living, urbanization, education, mortality and occupation structure) used in conventional "theories" of the demographic transition. As Watkins states:

In country after country it was found that after controlling for the level of modernization, those provinces that were contiguous, and especially those that could be said to share a language, religion, or ethnic identification, or more generally a cultural as well as spacial location were similar to each other in initial levels of marital fertility, in the time of the onset of the transition, and in the speed of decline (p. 441).

She further concludes that changes in fertility in response to modernization are highly variable and dependent upon "longstanding cultural differences" (p. 448) and "different past histories"

(p. 335). Modernization is thus not sufficient in itself to explain the timing of fertility decline. An understanding of prior cultural environments is fundamental. If this is the case it points to a crucial flaw in the design of the European Fertility Project — the lack of attention paid to pre-decline levels of fertility and their determinants over time. The incorporation of family reconstitution studies might provide this background. A more direct route might entail the kinds of back projections recently used for England and Wales by the Cambridge Group.

Teitelbaum's book is an important monograph stemming from the European Fertility Project. Particularly impressive is Chapter 7 where he develops and tests five alternative models of fertility transition ranging from the strictly socioeconomic (using "modernization" variables) to the purely cultural where he devises indices for religion, language, ethnicity, and political affiliation. His final model synthesizes both approaches. He concludes that for Great Britain in the aggregate cultural variables are more adequate predictors of fertility decline than are socio-economic ones, although the latter carry more weight when dealing with England and Wales separately from Scotland. Both sets of variables combined provide the most adequate statistical explanation. His overall evidence "represents a strong argument in favor of less simplistically socio-economic interpretations of the complex processes that led to the decline in marital fertility across the British Isles" (p. 183). Clearly, the message is that future historical studies of the demographic transition that ignore cultural variables will be sadly lacking in explanatory power.

There is much more here of specific interest to British social historians. One of Teitelbaum's central concerns is why, given that Britain seemed poised for fertility decline as early as 1850, did this not occur until the 1870s. This lag he attributes to five major factors: the relatively late emergence of literacy and primary education; the rapid expansion of high fertility coal mining (the proportions in coal mining, a new variable used in transition theory, are very significant when related to fertility); the decline of breast feeding; the abundance of cheap domestic servants for the middle classes; and the outlet of migration both internal and international which offered alternatives to restraining population growth. According to Teitelbaum certain "shocks" to the economic and social system in the 1870s and 1880s, especially the deteriorating economic situation of the middle classes and the growing scarcity of cheap domestic labour, set the fertility decline in motion. It was this class that seized upon the new technologies of birth control already known to them (the condom, douche, sponge and "Dutch Cap"). He thus places greater emphasis on less "primitive" forms of family limitation than Coale and Watkins.

The latter part of this thesis pertaining to the middle class, as Teitelbaum readily acknowledges, was first advanced by J. A. Banks over thirty years ago (*Prosperity and Parenthood*, 1954). In many ways it is a convincing proposition deserving of emphasis. What is puzzling, however, is that he chooses to raise these issues so late in the book — six pages from the end, in fact. No explicit recognition is given in the earlier empirical tests of his alternative models. Included in his socio-economic model, however, are three variables — proportions in civil service occupation, proportions in middle class occupations and proportion of females in domestic employment — which should reveal significant positive relationship to fertility decline if the Bank's thesis is valid. None of these factors are of statistical significance in relation to the pace of declining marital fertility. Teitelbaum makes no attempt to reconcile this apparent contradiction.

There is one other disappointing feature of his analysis. The geographical scope of this monograph obviously includes Ireland which is given equal weight with England and Wales and Scotland in the first six chapters where long term indices of changes in fertility and nuptiality are presented. When it comes time to analyze his explanatory models in the last three chapters, however, Ireland is excluded from consideration on grounds of data inaccuracy. One is left wondering, given the numerous earlier references to this area's demographic uniqueness, whether Ireland would "fit" the explanatory models discussed. This is of critical importance since it is Teitelbaum's contention that Ireland's fertility decline which began very late was not irreversible (pp. 117, 138, 149). Ireland thus stands as a contradiction to one of Coale and Watkins' main conclusions regarding the monotonic nature of fertility decline, an anomaly not recognized in their collection. Ireland obviously warrants a separate monograph as an exception in the European transition.

In voicing these criticisms one does not wish to minimize the immense contributions of these volumes. If, perhaps more questions are raised than fully resolved, this is to the credit of the project as a whole and merely suggests that research of this nature should move forward with the same energy that inspired its first quarter century. Indeed, social historians of modern Europe and demographers in general who neglect these works do so at their peril.

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S.L. Engerman and R.E. Gallman, (eds.) — Long-term Factors in American Economic Growth, Volume 51, Studies in Income and Wealth, National Bureau of Economic Research, Chicago and London: University of Chicago Press, 1986. Pp. xiii, 884.

The New Economic History emerged in the United Sates at the end of the 1950s. It was, then, part of the growing trend towards conservative doctrines in Economics and in politico-economic opinion in general. Neoclassical models were used to "predict", that is to deduce, what would have happened if certain historical events had, or had not, taken place. These were the famous "counter factuals". In the main, the New Economic History came down hard on hypotheses that had been the bases of liberal interpretations of United States economic development. The new view was that slavery had not been economically inefficient, that the railroads had not been an essential part of continental development, and that the "Cross of Gold" had not been such a cross after all.

In Canada there was some of this, but the most effective piece of new style Cleometrics was an assertion that development of the Canadian economy in the period 1870-1926 had only marginally depended on the export of wheat. The implication was, of course, that the massive expenditure on Western development was not economically justified. The wheat staple export was not efficient after all. It was, in fact, an expensive consequence, rather than a profitable cause, of westward expansion. The great Canadian cliché, corresponding to the great American clichés, was conservative rather than liberal, but that made it no more proof against the Iconoclastic onslaught of the new historical style. The economic interpretation of Confederation, attributable to Queen's University's W.A. Mackintosh, seemed to lose credibility, leaving us with a choice between two propositions: the Canadian economy has been built in defiance of market forces, and will disintegrate if market forces are given full play; or, the national policy of Western expansion was a mistake that will be corrected if market forces are given full play.

The volume under review here bears on these matters in two ways. It is the published papers of the National Bureau's 1986 Annual Conference on Research in Income and Wealth. This is the only one of the Bureau's Annual Conferences that has dealt with the contribution of Economic History to the solution of problems addressed by the Bureau since the Conferences of 1957 (Volume 24) and 1963 (Volume 30), from which the New Economic History of the following two decades emerged. The papers in the publications associated with those earlier Conferences did not fully reflect their importance for the new approach, but Volume 51 is a showpiece of recent developments in that sort of analysis.

The second way in which the volume bears on the matters raised at the beginning of this review follows from the presence in it of three papers dealing with Canadian economic development. The papers, end products of a massive updating of the National Accounts of Canada for the period 1870-1926, were delivered by members of the Department of Economics at Queen's University: M.C. Urquhart, R.M. McInnis and A.G. Green. The results of the project are an uncontestable contribution to Canadian history. In addition to the factual substance of their work, however, the authors, to a greater or lesser degree, present an interpretation of Canadian economic development that attempts