Of Rising Tides and Lifted Boats: Austrian Income Distribution over the Nineteenth Century

"A rising tide lifts all boats" is one of those generalizations about the effects of economic growth on personal incomes that are undoubtedly valid for the long run, but whose shorter-term implications must be subjected to close empirical scrutiny. Pammer’s study of growth and its distributional ramifications in nineteenth-century Austria makes a fine contribution along these lines of research. His concern is almost exclusively with developments in the crown lands that later made up the Republic of Austria, i.e., with those parts of the Monarchy that arguably underwent the most far-reaching economic transformations during the nineteenth century.

Before discussing Pammer’s findings in some detail, a few general observations may be useful. It is not taxonomic pedantry to insist on a distinction between economic growth and economic development. As Kindleberger has argued, growth simply means more output, whereas “development implies both more output and changes in the technical and institutional arrangements by which it is produced.”[1] Despite the Entwicklung in the title of the Pammer book, I judge it to be about growth, with some insightful, but essentially peripheral, observations on other aspects of development. In fact, his chapter headings consistently refer to Wachstum as the focus of his interest. This is not intended as a criticism; rather, I mean to situate the work as a complement to such development-oriented studies as Matis and Good.[2]

Pammer’s work deals strictly with internal, statistical manifestations of growth. But in his introductory remarks, he carefully points out that purely quantitative standards can give a partial answer, at best. When he discusses the determinants of Wohlstand, we are reminded of the relativity of the intra-economic effects of growth, as against the results suggested by "hard" international data. (Incidentally, his list of factors influencing Wohlstand suggests that what he has in mind is not just "welfare" in the narrow, economic sense but a more general conception of what probably would be better translated as "quality of life").[3] There can be little doubt, for example, that in the eighteenth century the gap between the richest economies and the poorest, in terms of per capita income, had been narrower than after the onset of the industrial revolution. But even then, as Adam Smith observed, in Europe "the accommodation [of an industrious and frugal peasant] exceeds that of many an African king."[3] In the end, therefore, international comparisons tend not to matter very much in individuals’ assessments of their Wohlstand, which are guided primarily by observations of the distribution of incomes and wealth within their own societies.

Two additional points are worth making. The first is obvious: Comparisons of growth in average incomes and wealth can be misleading, because they tell nothing about distributional changes. The second point may be more subtle: It has to do with the extent to which people’s perceptions of inequality are affected by qualitative factors, such as the ostentatious display of riches by those at the top of the income and wealth pyramids. No one
has dealt with this matter more incisively, or more bit- 
ingly, than Thorstein Veblen.[4] Satisfaction with one’s 
station in life is a moving target. By the beginning of 
the twentieth century, one can certainly discern elements 
of what would later be called “the revolution of rising 
extpectations” that accompanies development. Thanks to 
various political movements, these expectations were fo-
cussed on the contributions to public well-being of im-
proved physical and social infrastructures, in addition to 
rising incomes. The assessment of these contributions 
has to be left to different kinds of empirical research as 
well as to narrative historiography.

I now turn to discussing the substance of Pammer’s 
work, starting with a piece of advice: Readers with an in-
tensive interest in the study’s statistical details may wish 
to go first to the “Anhang” (pp. 281-303), and especially to 
Section C., “Daten,” where the author presents a careful 
account of his sources and of the calculations underlying 
the tables in the body of the study. Absent such an expla-
nation, the legends to many of these tables may appear 
somewhat cursory and cryptic.

Chapter One, “Wachstum, Gleichheit, Wohlstand,” 
explores salient aspects of the growth-income nexus. It 
includes, as I suggested above, a praiseworthy attention 
to non-pecuniary arguments in people’s welfare func-
tion. Such parameters as “soziale Sicherheit,” “Arbeit-
szufriedenheit,” “Umweltbedingungen,” etc. can be mea-
sured, if at all, only by surrogate indicators, and they play 
no further role in the study’s findings.

Concerning changes in income distribution over the 
long term (and setting aside the matter of advances in ab-
solute income levels), Pammer draws on the well-known 
Kuznets thesis, according to which inequality tends to 
rise in the early stages of growth, with the process revers-
ing itself during the later phases. The proximate causes 
of these shifts may be found, among others, in sectoral 
transformations, in educational developments, techno-
logical advances, urbanization, and institutional changes, 
especially as they affect the performance of goods and la-
bor markets.

Pammer discusses these matters in admirable fashion. 
I only wish that he had given pride of place to the role of 
major technical innovations, which surely have been the 
main driving forces of growth and development. And it is 
in examining the economic impact of major innovations 
(steam power, railroads, electric power, etc.) that one can 
most readily trace the combined distributional effects of 
such factors as, for example, sectoral growth and decline, 
concomitant changes in employment and relative wages, 
as well as the obsolescence of labor skills and know-how. 
To be fair, I must mention here that Pammer does devote 
a section of a later chapter to the role of railroad finance; 
however, his brief treatment hardly does justice to the 
very complex story of private and state entrepreneurship 
and their effects.

On pp. 26-43, Pammer presents a rationale for his 
approach—the use of wealth statistics as the bases for the 
investigation. The purely eclectic argument is, of course, 
that detailed data sets on the growth and distribution of 
wealth are more readily available and more accessible 
than those on incomes. But the substantive argument 
carries equal weight: The growth of aggregate wealth 
indicates that increasing aggregate incomes enabled a 
closed economy to assign rising proportions of these in-
comes to savings; and these, in the form of productive in-
vestments, create additional income. (Concentration on 
a “closed” economy bypasses the further complications 
created by foreign investment.) Pammer also justifies his 
approach by listing the well-known difficulties of relying 
on income data, among them the valuation of nonpecu-
niary household incomes, the index number problem in 
the measurement of long-term changes in real incomes, 
the explanation of interregional differences in incomes, 
and so on. This is a thoroughly workmanlike job.

In Chapter Two, the author examines the role of de-

gographic developments. These may affect distribution 
in two ways: Via changes in income and wealth differen-
tials among groups defined by age, gender and occupa-
tion; and via changes in the proportions of these groups 
in the total population. Pammer documents an increase 
in population growth rates from around .5 to 1.0 per cent 
per annum over the entire period, albeit with substantial 
regional differences.

Chapter Three, “Anleger, Staat und Unternehmen,” 
traces the accumulation of financial wealth over time, 
without attention to distributional issues. As such, it ad-
dresses the question in what form the savings of the pop-
ulation were taken up by various types of investment. 
The author argues that, in matching the relatively mod-
est rates of savings growth with the investment demands 
of state and industry, the problem was neither a capital 
shortage, nor a lack of the “absorptive capacity” often as-
sociated with transitional economies.

Crucial to the process was the development of in-
vestment modalities that met savers’ risk-return criteria. 
Needless to say, central- and regional-government obli-
gations of various types played a major role throughout 
the period, with private-sector issues (predominantly of
industrial and financial entities) apparently assuming importance only during the five decades before World War I. I write, "apparently," because most of the author’s data sources deal only with the years from 1848 onward, and because he presents no complete summary statistics.

In Chapter Four, the author deals specifically with economic growth in the century preceding World War I. According to Pammer’s estimates, per capita real income roughly doubled over this period. He attributes this increase to across-the-board improvements in productivity, as well as to structural shifts from less productive to more productive sectors. Regional differences were pervasive: In terms of income and income growth, he places the Reichsrathsländer as a whole in the "mid-range of European countries" (p. 175); but he points out that industrialized Lower Austria (just like industrial Bohemia) probably was among the higher-income regions of Europe. By contrast, Galicia, Bukovina and the Dalmatian coast lands ranked among the regions with lowest per capita income.

This initial outline is followed by a brief summary of the theoretical literature on growth as well as of empirical work concerning nineteenth-century Austrian growth. On the basis of his findings, Pammer comes out on the side of those researchers who see (industrialization-driven) growth in the Cisleithanian regions as a gradual process, with no identifiable "take-offs" a la Rostow[5] and with no major discontinuities.

What follows are the author’s own estimates of wealth accumulation in consequence of income growth. His statistical sources consist in the first place of official records on the settlement of estates. As he admits, these essentially yield what should be considered “cross-sectional data over time,” since they tell nothing about the behavior of the deceased persons’ incomes during their lives. Therefore, they ignore the possible effects of human-capital formation over an individual's lifetime, as well as the effects of streams of entitlements, such as yields from annuities or pensions.

Given these limitations, Pammer presents a series of descriptive econometric models for the period 1820-1913, covering “non-entrepreneurial wealth” for the country as a whole and for the individual crown lands. As he recognizes, the detailed results of these investigations are to be taken with a grain of salt, on methodological as well as substantive grounds. What matters in the end, however, is that a summary of all these calculations presents a plausible picture of long-term growth (p. 197). Real net wealth per capita for the entire population had risen from 864 florin in 1839 to 2,015 florin by 1910, representing an average annual increase of 1.6 per cent.

Chapter Five addresses the question implied in the second part of the book’s title: What happened to the distribution of wealth over this century of apparent average growth? Intertemporal shifts in this distribution may of course be the result of a whole host of changing “inequalities”—for example, of the rise and fall of sectors, of regional changes, of relative increases or decreases in income classes (the relation between income growth and savings growth being non-linearly positive), of shifts in the age structure of the population, and so on. In order to capture the net results of these factors, Pammer resorts to the most commonly used summary measure of inequality, the Gini coefficient. Put simply, this coefficient indicates the degree of deviation of actual income distribution from a hypothetical, perfectly egalitarian distribution. Not surprisingly, the author’s somewhat tedious econometric exercises show that changes in sectoral, occupational and regional inequality explain the vast bulk of the observed, aggregate results. These three are not, of course, fully independent variables, in the statistical sense.

In Chapter Six, Pammer finally turns to the question of how growing wealth was distributed among the various investment modalities. Not surprisingly, real estate, private financial claims, and debt instruments played a leading, if declining, role among total as well as non-entrepreneurial assets throughout the period. Among the latter, these three had accounted for roughly 88 per cent of all wealth in 1830, and for about 77 per cent in 1910. The decline is offset mainly by a rise in savings accounts, from less than 4.1 per cent to 7.4 per cent of total wealth, and in corporate shares, from 1 per cent to 8.5 per cent. An examination of the distribution of assets by occupational groups shows the expected variations, e.g., with real estate dominant in the agricultural sector, and financial instruments among the “higher-ranking”, mostly urban, occupations.

Chapter Seven is a brief summary of the study’s results. Pammer concludes that, on the whole, the evolution of wealth distribution over the century follows the Kuznets pattern: In an initially relatively egalitarian society, the onset of “modern” economic growth led to increasing inequality, a process that reversed itself only in the later phases. The author tempers this judgment, however, by pointing out that the aggregate findings are the net result of partly complementary and partly contradictory developments. In particular, the overall pattern is
mirrored in some regions but not in others.

No generic explanation for these differences is offered. Rather, the author ends with some reflections on two issues he had raised at the outset. The first has to do with the question about degree to which the distribution of wealth reflects the distribution of Wohlstand—the quality of life. To the extent that the factors enhancing this quality were in the nature of public or semi-public goods (e.g., health conditions, average life expectancy, educational opportunities, political participation, etc.), inequality may well have been less than is suggested by the statistical record. The second issue concerns the relationship between income distribution and wealth distribution. In particular, there is the matter of accounting for the status of those groups whose incomes, while most likely growing, were nevertheless so low as to prohibit the accumulation of wealth in any form. Whatever the answers to these questions, Pammer’s study leaves no doubt that, by the outbreak of World War I, Austrians were “better off”—in any reasonable sense of that term—than they had been a century earlier. The tide had indeed lifted all boats, albeit at varying rates.

I hope that from the tenor of this review, readers will have concluded that I consider this a very good book. To be sure, here and there one is bothered by the scholarly cumbersomeness that seems to be de rigueur for Habilitationsschriften. And in some places the author engages in what I consider statistical overkill. But this is just minor quibbling not meant to detract from the study’s value. Much more serious, especially in a work of such encyclopedic coverage, is the absence of an index. For those not interested in reading the work cover to cover, the list of captions of the 86 tables may serve as a substitute guide, albeit an inadequate one.

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