The same experiment with a Cobb Douglas production function was carried out for Italy, and for Western Europe as a whole. For Italy we have the point estimates of GDP and population by Malanima (1998, 2003). Because his estimates relate to northern Italy, we are dealing with a relatively urban society here, in which land played a smaller role than in England. Italy was also more or less self-sufficient in foodstuffs, which means that we probably do not have the problems encountered in the case of Holland. I assumed shares in GDP of 15% for land, 60% for labour, and 25% for capital, but also experimented with a model with radically different shares (25%, 40% and 35% respectively) to find out how sensitive the estimates are to this assumption. Cultivated land remained basically unchanged between 1300 and 1800, the labour input increased with population (and I experimented with a decline of working days from 250 to 200 between 1350 and 1450 followed by an increase from 200 to 250 between 1500 and 1600), and the capital stock in 1300 was determined by its share in GDP of 25% (or 35%) and an interest rate of 20%. For the first decades of the 14th century the Allen (2001) wage series (which begin in 1326) was supplemented by the wage series published by Malanima (2004).

Figure 38 presents the result of the simulation: real wages rise in the second half of the fourteenth and first half of the fifteenth century by about 60% on average (less than in England), and begin to fall after c. 1450, a decline that is almost continuous but slow until about 1750, and accelerates in the second half of the 18th century (according to Malanima (2004) the Allen estimates overestimate the decline after 1750 however). This pattern can be matched by the model assuming 1) that the investment rate was 4.5% initially and 2) that between 1348 and 1400 there was continuous growth of total factor productivity of .40% annually, the rate of which fell constantly to zero between 1400 and 1450, and 3) that after 1450 the investment share also declines to a mere 1% of GDP, at which very low level it remains until the end of the eighteenth century (and, if the simulation was to follow the sharp
The alternative experiment (with a much lower share of labour in GDP) started with the same assumptions, but needed a more modest rate of technological progress after 1340 (of .20% between 1349 and 1420) and a slightly higher level of gross investment after 1450 (of 2% annually); the second experiment may therefore be somewhat more realistic.

Figure 39 pictures the resulting estimates of GDP per capita (of the two experiments). In the very long run both sets of estimates seem to concur, but the model in both cases predicted a strong increase in the sixty to eighty years after the Black Death, which is missing from the Malanima estimates. Between 1450 and 1550 the Malanima estimates and the results of the Cobb Douglas simulation converge again, and for the rest of the Early Modern period the two approaches give more or less similar results (but note that if the simulation had followed the decline of real wages after 1750 according to the Allen estimate more closely, the fall in GDP per capita would have been larger than Malanima (2003) estimated). Differences with England in the same period are striking: