

Data Appendix

This appendix describes the sources and procedures used to construct Figures 1-4 in the text, as well as the data for all of the empirical analyses. Unless noted otherwise, all data comes from B. R. Mitchell (1998). I abbreviate this source as Mam, Maa, Meu for *International Historical Statistics: the Americas, 1750-1993*, *International Historical Statistics: Africa, Asia and Oceania, 1750-1993*, and *International Historical Statistics: Europe, 1750-1993*. This data includes all population figures prior to 1993, all enrollment rates prior to 1994, all physical capital investment rates prior to 1994. For some population figures in 1980 and 1990 we used those from Summers and Heston online, hereafter abbreviated as S&H online. For 2000 population we used data from the *Time Almanac 2001*.

Physical capital investment rates prior to 1992 were measured using Mam, Maa, and Meu. Mam, Maa and Meu provide annual information on gross physical capital formation. Between the census years t-1 and t, we calculate the mean investment rate. Most of the data comes from real capital formation as a fraction of real income, but when this data was missing we substituted nominal values of capital formation relative to nominal income. For some countries we used investment rates from S&H online.

In order to calculate physical capital per worker, we created average investment rates over the coverage years. For example suppose we have two observations on income per worker in 1990 and 2000, respectively. In order to calculate the physical capital per worker in 2000 we use the average investment rate from 1990 to 1999 inclusive. We use a perpetual inventory method of calculation. In order to illustrate this method, assume that we observe output per worker in 1990 and 2000, y_{1990} and y_{2000} , respectively. Let i_{2000} be the average investment rate for years 1990 to 1999 inclusive. Finally assume that k_{1990} is the physical capital per worker in 1990. Physical capital per worker in 1991 would be given by:

$$k_{1991} = \frac{i_{2000}y_{1990} + (1 - \delta)k_{1990}}{g_w}$$

where g_w is the growth rate of the labor force between 1990 and 1991, and δ is the annual depreciation rate on capital. Now let g_y be the annualized growth rate of output per worker from 1990 to 2000 and redefine g_w to be the annualized growth rate of labor force between 1990 and 2000. Repeated substitution of the above relation produces:

$$k_{2000} = i_{2000}y_{1990} \sum_{i=0}^9 \frac{(1 - \delta)^{9-i} g_y^i}{g_w^{10-i}} + \frac{(1 - \delta)^{10} k_{1990}}{g_w^{10}}$$

The first term on the right hand side is, by assumption, a finite geometric sum and hence finite. The last term is an exponentially decaying term of the previous period's physical capital per worker. Thus we can rewrite the above expression as:

$$k_{2000} = i_{2000}y_{1990} \frac{\left\{ \frac{(1 - \delta)^9}{g_w^{10}} - \frac{g_y^{10}}{(1 - \delta)} \right\}}{1 - (1 - \delta)g_y g_w} + \frac{(1 - \delta)^{10} k_{1990}}{g_w^{10}}$$

Notice that now we must pick an initial condition, the initial capital per worker value. We assume that in the initial observation, physical capital is on the balanced growth path. Thus

assume that the first year of observation is x , then under the assumption that k_x is on the balanced path, it grows at the rate of output growth, g_y . Thus it solves the following relation:

$$k_{x+1} = k_x g_y = \frac{i_{x+1} y_x + (1 - \delta) k_x}{g_w}$$

Solving for k_x produces:

$$k_x = \frac{i_{x+1} y_x}{g_w g_y - 1 + \delta}$$

The next question is what investment rate to use. The investment rates from Mitchell are nominal investment rates. That is investment rates assuming that the price of capital is equal to the price of consumption for all countries. However Summers & Heston provide PPP adjusted as well as nominal investment rates for countries. We ran the regression of PPP adjusted investment rates against nominal investment rates, log of real output per capita in 1985 dollars, and an interaction between nominal investment rates and log of real output per capita in 1985 dollars and a constant. However before we ran the regressions we calculated decade averages of PPP investment rates, nominal investment rates, log of real output per capita in 1985 dollars and the interaction of the average nominal investment rate and log of real output per capita in 1985 dollars. Column one of Table A1 produces these regression results. Column two of Table A1 provides a robustness check on the regressions by examining the results of a regression using all of the years of the data, instead of averaging them by decade, there are no differences. For the paper we used the results in column 1 to produce our PPP investment rates. .

A1: Regressions of PPP investment rates on nominal investment rates
(Standard error)

variable	decade average observations	yearly observations
nominal investment rate	1.6127 (.1017)	1.5749 (.0344)
ln y	.0091 (.0025)	.0093 (.0009)
nominal investment rate * ln y	-.0838 (.0127)	-.0800 (.0043)
constant	-.0687 (.0186)	-.0697 (.0065)
number of observations	610	5842
\bar{R}^2	.9066	.8989

The range of the variables are given in the following Table. The first half of Table A2

provides the mean, standard deviation, minimum and maximum for the Summers & Heston 1950-2000 data. The second half of the table provides the same information for our Mitchell data. As can be seen, the almost all of the values of the variables in the years prior to 1950 are completely contained in the range from 1950-2000. The notable exception is the negative investment rate in the Netherlands during the 1930s. However since this is not an initial year, it does not cause any problems in the calculations of real physical capital per worker, although obviously real capital per worker falls between 1930 and 1940! Hence our estimates of PPP investment rates are in fact projections and not extrapolations.

A2: Descriptive statistics of Summers & Heston (1950-2000) and Mitchell prior to 1950

variable	Summers &	Heston	1950 to 2000		Mitchell	prior to	1950	
	mean	std. dev.	min	max	mean	std. dev.	min	max
nominal inv. rate	.1656	.0936	.0121	.5440	.1200	.0437	-.008	.3586
ln y	7.852	1.025	5.658	10.134	7.364	.644	5.623	8.755
nom. inv. rate X lny	1.3532	.8505	.0736	4.733	.8913	.358	-.0646	2.854

Maa, Mam and Meu provide both nominal income and real income prior to 1993. However often his data uses different base years. When this occurred almost all of the time he provides overlapping values of real income which allows the calculation of the adjustment factor. When this does not occur, and when it is necessary to calculate a real income value for a switch year we assumed that the inflation rate in the missing year was given by the inflation rate in the prior year. Once real incomes, in local currency, for all countries were calculated we used the overlapping years with S&H to calculate the exchange rate between the local currency and S&H 1985 international dollars. Typically the overlapping years were 1960, 1970, 1980 and 1990. For those years we used the S&H international dollar figures for per capita incomes. For 1999 we used values for the US from the *World Development Report*, hereafter abbreviated WDR. If Maa, Mam and Meu do not provide real income for 1820, 1850, 1870, 1890 and beyond, we used the values from Maddison (1995), hereafter referred to as Mn. We converted into consistent dollars by taking the closest year from our Maa, Mam and Meu data that overlaps with Mn coverage to get the conversion rate.

In order to calculate enrollment rates in 1990, we used interpolated values of the share of the population between the ages of 5 and 17 using the *Dorling Kindersley World Reference Atlas* (1994), hereafter abbreviated as DK, or Keyfitz and Flieger *World Population Growth and Aging: Demographic Trends in the Late 20th Century* (1990), hereafter abbreviated as KF. These sources provides the age structure of the population for the age groups 0-14, 15-64 and 65 and

older. Since the age groups do not completely match our group of interest, we assumed that populations were uniformly distributed across age groups. Thus we assume that $\frac{2}{3}$ of the 0-14 group were between the ages of 5 and 14, and that $\frac{3}{50}$ of the age group 15-64 were 15, 16 or 17. DK gives population shares of these groups for 1960, 1970, 1980, 1990 and 2000. However since we are interested in both primary school capital and secondary school capital, we need information on the relevant population at risk to each schooling level. For countries with primary school length of 8 years, we used $\frac{8}{15}$ of the 0-14 group as being between 5 and 13. If secondary school then ran 4 years, we used $\frac{1}{15}$ of the 0-14 age group and $\frac{3}{50}$ of the age group 15-64 were 15, 16 or 17. In order to calculate the 5-17 demographic share for 1988, we used the geometric interpolated value between 1980 and 1990. To calculate the enrollment rates for higher education we used total enrollments in year t divided by the year t population between the ages of 18-24.

To calculate the stock of human capital of each type, primary school stock, secondary school stock and higher education stock, we used a perpetual inventory method. We focused on males, but we typically used information on total enrollments, not enrollments of men. Although this induces a downward bias in the measure of male enrollments, we feel that the information is still valuable. The following example will illustrate the nature of our calculations. In period t+1, the stock of adults, aged 25 and older, with exposure to education level i, H_{t+1}^i i=primary, secondary and higher, but no more is given by:

$$H_{t+1}^i = H_t^i(1 - \delta_t) + I_t^i$$

where δ_t is the death rate and I_t^i is the flow of new adults with exposure to education level i and no more. We assumed that δ_t does not vary by education class.

It is useful to put the human capital measure as a fraction of the labor force. Thus we normalize and produce:

$$\frac{H_{t+1}^i}{L_{t+1}} = \frac{H_t^i}{L_t} \frac{L_t}{L_{t+1}} (1 - \delta_t) + \frac{I_t^i}{L_{t+1}}$$

$$h_{t+1}^i = h_t^i \frac{L_t}{L_{t+1}} (1 - \delta_t) + \frac{I_t^i}{L_{t+1}}$$

In order to proceed we need a measure of the death rate of adults. We constructed this for each country using the information provided below about the ages of schooling for primary and secondary education. We illustrate our calculations by presenting the case where primary school lasts from ages 6-13 and secondary school lasts from ages 14-17.¹ Assume that the time gap between period t and t+1 is 10 years. Then we used the following equation:

¹We assumed for all countries that higher education encompasses individuals aged 18-14.

$$L_{t+1} = L_t(1 - \delta_t) + r_t^c \ell[9 - 24]_t + (r_t^{\text{sec}} - r_t^c) \ell[8 - 17]_t \\ + (r_t^{\text{primary}} - r_t^{\text{sec}}) \ell[0 - 13]_t + (1 - r_t^{\text{primary}}) \ell[0 - 13]_t$$

where r_t^c is the higher education enrollment rate, r_t^{sec} is the secondary school enrollment rate, r_t^{primary} is the primary school enrollment rate, and $\ell[i-j]$ is the number of males between the ages of i and j , inclusive. Notice that this definition allows for the calculation of the undepreciated labor force, in other words:

$$L_t(1 - \delta_t) = L_{t+1} - r_t^c \ell[9 - 24]_t - (r_t^{\text{sec}} - r_t^c) \ell[8 - 17]_t \\ - (r_t^{\text{primary}} - r_t^{\text{sec}}) \ell[0 - 13]_t - (1 - r_t^{\text{primary}}) \ell[0 - 13]_t$$

To complete the analysis we use the information on enrollments for I_t^i . In this example, these are:

$$I_t^c = r_t^c \ell[9 - 24]_t \\ I_t^{\text{sec}} = (r_t^{\text{sec}} - r_t^c) \ell[8 - 17]_t \\ I_t^{\text{primary}} = (r_t^{\text{primary}} - r_t^{\text{sec}}) \ell[0 - 13]_t$$

Western Countries

Australia (1861-2000): Populations for 1861, 1871, 1881, 1891, 1901, 1911, 1921, 1933, 1947, 1954, 1961, 1971, 1980, 1990 come from Maa Table A5 p. 64, 65 and 66. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1861, 1871, 1881, 1891, 1901, 1911, 1921, 1933, 1947, 1954, 1961, 1971, 1981 and 1990 come from Maa Table A2 p. 28. The age distribution for Australia for 1990 is interpolated from 1981 and 1992 values. The age distribution for Australia for 2000 comes from DK.

Labor force figures for 1901, 1911, 1921, 1931, 1941, 1951, 1961, 1971, 1980 and 1990 come from Maa Table B1 p. 102. Labor force data for Australia for 1980 and 1990 are interpolated from 1971, 1981 and 1991 data. Labor force data for 1999 come from WDR.

Real GNPs for 1861-1993 come from Maa Table J1 pp. 1039, 1040 and 1041. The dollar values for 1954, 1961, 1971, 1980 and 1990 come from S&H online. The 1861-1947 dollar values are converted using the geometric average for 1954, 1961 and 1971. The 1999 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1861-1998 from Maa

Table J1, pp. 1039, 1040 and 1041 and WDR (various years).

Enrollments in school from 1840-1991, come from Maa Table I1 pp. 992 and 993. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. However since primary and secondary school enrollments are not reported separately until 1970, we used the following apportionment: 85 percent of students were in primary school in 1861, 1871. Eighty percent of students in 1881 were primary students. Seventy-five percent of students in 1891, 1901, 1911, 1921 were primary students. Seventy percent of students in 1931 were primary students. Two thirds of students in 1947, 1954 were primary students. Fifty-five percent of students in 1961 were primary students. Higher education enrollments for 1906-1993 from Maa Table I2 p. 1006. For years prior to 1960 we used enrollment rates of .0001, .001, .001, .001, .002.

Austria (1880-2000): Population figures are for the Austrian Provinces of the Hapsburg Empire, 1880, 1890, 1900 and 1910, from Meu Table A2 p. 13. Populations for Republic of Austria 1923, 1934, 1951, 1961, 1971, 1981, 1991 come from Meu Table A2 p. 13. Population for Austria 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1880, 1890, 1900, 1910, 1923, 1934, 1951, 1961, 1971, 1981, 1991 come from M (1980) Table A2 p. 13. Age distribution for Austria 2000 comes from DK (1994).

Labor force figures for 1880, 1890, 1900, 1910, 1920, 1934, 1939, 1951, 1961, 1971, 1981, 1991 are from Meu Table B1 p. 145. Labor force data for 2000 come WDR.

Real GNPs for 1880, 1890, 1900 and 1910 are from Mn. Real GNPs for 1923, 1934 are from Meu Table J1 914. Dollar values are from geometric average conversion rates for 1951, 1961 and 1971. Real GNP for 1951, 1961, 1971, 1981 and 1991 are from S&H online. Real GNP and physical capital investment rates comes from intraperiod averages of real gross capital formation and real income for 1913-1993 from Meu Table J1 pp. 908, 914 & 922. Real GNP for 2000 comes from WDR. Physical capital investment rates from 1869-1913 is .12, averaged from the 1913 and 1923-1933 periods.

Enrollments in primary and secondary school from 1860-1988 come from Meu Table I1 pp. 870, 873, 880 & 887. To calculate enrollment rates prior to 1971, we assumed 6-11 are primary school age and 12-17 are secondary school age. In 1971 we assumed that primary school lasts 8 years and secondary school lasts 4 years. Therefore 6-13 are primary school age and 14-17 are secondary school age. This switch occurred to fit with the enrollment rate data in WDR for 1980, 1988. Higher education enrollments are from Meu Table I2 pp. 894, 895, 897, and 899.

Belgium (1846-2000): Populations for 1846, 1856, 1866, 1880, 1890, 1900, 1910, 1920, 1930, 1947, 1961, 1970, 1981, 1991 come from Meu Table A2 p. 14. Population for 2000

comes from *Time Almanac 2001*.

The age distributions of the population for 1846, 1856, 1866, 1880, 1890, 1900, 1910, 1920, 1930, 1947, 1961, 1970, 1981, 1991 come from Meu Table A2 p. 14. Age distribution for Belgium 2000 comes from DK (1994).

Labor force figures for 1846, 1856, 1866, 1880, 1890, 1900, 1910, 1920, 1930, 1947, 1961, 1970, 1981 and 1990 are from Meu Table B1 p. 146. Labor force data for 2000 come from WDR.

Real GNPs and physical capital investment rates come from the intraperiod averages of real gross capital formation and real income for 1920-1993 from Meu Table J1 pp. 908, 914 & 922. Real GNP for 2000 comes from WDR. Physical capital investment rate for 1846-1930 is the average for investment rates of Germany and the United Kingdom over the comparable periods.

Enrollments in primary and secondary school from 1830-1993 come from Meu Table I1 pp. 870, 873, 880 & 887. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments are from Meu Table I2 pp. 894, 895, 897 and 899.

Canada (1871-2000): Populations for 1871, 1881, 1891, 1901, 1911, 1921, 1931, 1941, 1951, 1961, 1971, 1981 and 1991 come from Mam Table A2 p. 11. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1871, 1881, 1891, 1901, 1911, 1921, 1931, 1941, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 p. 11. The age distribution for Canada for 2000 comes from DK (1994).

Labor force figures for 1891, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Mam Table B1 p. 102. Labor force data for 2000 come from WDR.

Real GNPs for 1871-1993 are from Mam Table J1 pp. 762, 763 and 767. Dollar values for 1951, 1961, 1971, 1981 and 1991 are from S&H online. The dollar values for 1871-1941 are from geometric average conversion rate from 1951, 1961 and 1971. The 2000 real GNP value comes from WDR. Physical capital investment rates come from the gross real capital formation and real income for 1870, 1890, 1900, 1910 and 1920 come from Mam Table J1, pp. 762, 763. We used a physical capital investment rate of .1415 for 1871-1880, the average of the surrounding decades. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1926-1998 from Mam Table J1, pp. 763 and 767 and WDR (various years).

Enrollments in school from 1868-1993 come from Mam Table I1 pp. 718, 721, 725 and 730. Since school enrollments are not broken down into primary and secondary

categories, we tried to fit the enrollment rates to those from the WDR, mainly 1961 and 1971. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. We assumed 75 percent of total enrollments were in primary school in 1871, 1881, 1891, 1901. We assumed 70 percent of total enrollments were in primary school in 1911, 1921. We assumed that 67 percent of total enrollments were in primary school in 1931, 1941, 1951. Higher education enrollment rates are for 1920-1993 from Mam Table I2 pp. 751, 752 and 754. For prior years, 1871-1911 we used .002, .005, .005, .01 and .01.

Denmark (1870-2000): Populations for 1870, 1880, 1890, 1901, 1911, 1921, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table A2 p.17. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1870, 1880, 1890, 1901, 1911, 1921, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table A2 p. 17. Age distribution for Denmark for 2000 comes from DK (1994).

Labor force figures for 1870, 1880, 1890, 1901, 1911, 1921, 1930, 1940, 1950, 1960, 1970, 1981 and 1991 come from Meu Table B1 p. 147. Labor force data for 2000 come from WDR.

Real GNP from 1850-1988 comes from Meu Table J1, pp. 906, 909, 915 and 922. The 1950, 1960, 1970, 1980 and 1988 dollar values are from S&H online. The 1850-1940 values are converted using the geometric average of the 1950, 1960 and 1970 conversion rates. Real GNP for 1996 comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1850-1998 from Meu Table J1, pp. 906, 909, 915 and 922 and WDR (various years).

Enrollments in primary and secondary school from 1893-1993 come from Meu Table I1 pp. 874, 881 and 887. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. We used .50, .75 for primary enrollment rates, .005, .01 for secondary enrollment rates and .0005 for higher education enrollment rates for 1870 and 1880 respectively. Higher education enrollments from 1893-1993 come from Meu Table I2 pp. 895 and 897. We used .05 percent for both 1870 and 1880.

Finland (1850-2000): Populations for 1850, 1865, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 18. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1850, 1865, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 18. Age distribution for Finland for 2000 comes from DK (1994).

Labor force figures for 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970,

1980, 1990 come from Meu Table B1 p. 148. Labor force data for 1850 and 1865 are calculated from the 1880 labor force participation data. Labor force data for 2000 come from WDR.

Real GNP for 1850 comes from Mn. The Real GNP data from 1865-1988 comes from Meu Table J1, pp. 906, 909, 915 and 922. The 1950, 1960, 1970, 1980 and 1990 dollar values come from S&H online. The 1865-1940 values are converted using the geometric average of the 1950, 1960 and 1970 conversion rates. Real GNP for 2000 comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1865-1998 from Meu Table J1, pp. 906, 909, 915 and 922 and WDR (various years). Physical capital investment rate for 1865 is .09.

Enrollments in primary and secondary school from 1875-1993 come from Meu Table I1 pp. 874, 881 and 887. For 1850 and 1865 we used .025 and .05 for enrollment rates in primary school and .01 and .018 for enrollment rates in secondary school. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments from 1840-1993 are from Meu Table I2 pp. 894, 895, 897 and 899.

France (1850-2000): Populations for 1851, 1861, 1872, 1881, 1891, 1901, 1911, 1921, 1931, 1946, 1954, 1962, 1968, 1975, 1980 and 1991 come from Meu Table A2, pp. 19 and 20. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1851, 1861, 1872, 1881, 1891, 1901, 1911, 1921, 1931, 1946, 1954, 1962, 1968, 1975, 1980 and 1991 come from Meu Table A2, pp. 19, 20 and 21. Age distribution for France for 2000 comes from DK (1994).

Labor force data for 1851, 1861, 1872, 1881 and 1891 come from interpolations of data for 1856, 1866, 1886, 1896 from Meu Table B1, p. 149. (The 1851 figure comes from extrapolation using the 1861 labor force participation rate.) Labor force figures for 1901, 1911, 1921, 1931, 1946, 1954, 1962, 1968, 1975, 1981 and 1991 come from Meu Table B1 p. 149. The 1981 value comes from interpolations using the 1975, 1982 values.) Labor force data for 2000 come from WDR.

Real GNP for 1850-1891 come from Mn. Real GNP for 1901-1991 come from Meu Table J1, pp. 909, 915 and 922. Real GNP for 2000 comes from WDR. Physical capital investment rates for 1850-1949 are the average physical capital investment rates for Germany and the UK over the same periods. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1949-1998 from Meu Table J1, pp.915 & 922 and WDR (various years).

Enrollments in primary and secondary school from 1850-1993 come from Meu Table I1, pp. 870, 874, 882 and 888. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1889-

1993 are from Meu Table I2, pp. 895 897 and 899. We used .0002, .0002, .0003 and .0003 for higher education enrollment rates over the 1850-1881 period.

Germany (1880-2000): Populations for 1852, 1861, 1871, 1880, 1890, 1900, 1910, 1925, 1933 and 1939 come from Meu Table A1, p. 4. Populations for West Germany 1950, 1961, 1970 and 1980 come from Meu Table A1, p. 4. Population for West Germany in 1990 comes from S&H online. Population for Germany 2000 from *Time Almanac 2001*.

The age distributions of the population for 1871, 1880, 1890, 1900, 1910, 1925, 1933 and 1939 come from Meu Table A2 pp. 21 and 22. The age distributions for 1852 and 1861 are extrapolated from the age distribution in 1871. The age distributions for West Germany 1950, 1961, 1970 and 1980 come from Meu Table A2 p. 22. Age distribution for West Germany for 1990 and Germany in 2000 comes from DK (1994).

Labor force figures for 1852, 1861, 1871, 1880 are extrapolated from the labor force participation rate in 1882. Labor force figures for 1882, 1895, 1907, 1925, 1933, 1939 come from Meu Table B1 p. 150. West German labor force data for 1946, 1950, 1961, 1970 and 1980 and 1990 are from Meu Table B1 p. 150. Labor force data for 2000 come from WDR.

Real GNP for 1850-1993 come from Meu Table I1, pp. 906, 910, 916 and 923. The 1950, 1961, 1970, 1980, 1990 dollar figures are from S&H online. (The 1850-1939 figures use the geometric average of 1950, 1961 and 1970 conversion rates.) The 2000 real GNP value comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1850-1993 from M (1980) Table J1, pp. 906, 910, 916 and 923 and WDR (various years).

Enrollments in primary, 1900-1993, and secondary school, 1910-1993, come from Meu Table I1, pp. 875, 882, and 888. Primary, secondary and higher education enrollment rates for 1870, 1880 and 1890 are .75, 1, .08, .11 and .001, .0025 respectively. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1872-1993 comes from Meu Table I2, pp. 895, 897 and 899.

Ireland (1926-2000): Population for 1926, 1936, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 p. 27. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1926, 1936, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 p. 27. The age distribution for Ireland for 2000 comes from KF.

Labor force figures for 1926, 1936, 1951, 1961, 1971, 1981 and 1991 come from Meu Table B1 p. 152. Labor force data for 2000 come from WDR.

Real GNP for 1926-1993 come from Meu Table J1, pp. 910, 917 and 924. The 1926 and 1936 values are from the nominal index, corrected for by the consumer price index from Ireland, using Meu Table H2 p. 865. The 1951, 1961, 1971, 1980 and 1990 dollar values are from S&H online. The 1926 and 1936 values are from the geometric average conversion rates for 1951, 1961 and 1971. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1947-2000 from Meu Table J1, pp. 917 and 924 and WDR (various years). For 1926 and 1936 we used the value of .09.

Enrollments in primary and secondary school for 1920-1993 come from Meu Table I1 p. 883 and 888. To calculate enrollment rates prior to 1971, we assumed 6-11 are primary school age and 12-17 are secondary school age. In 1971 we switched to 6-13 primary and 14-17 secondary in order to match enrollment rate data from 1980 and beyond. Higher education enrollments for 1920-1992 come from Meu Table I2 pp. 898 and 899.

Netherlands (1849-2000): Populations for 1849, 1859, 1869, 1879, 1889, 1899, 1909, 1920, 1930, 1940 1947, 1960, 1970, 1980 and 1991 come from Meu Table A2 pp. 29 and 30. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1849, 1859, 1869, 1879, 1889, 1899, 1909, 1920, 1930, 1940 1947, 1960, 1970, 1980 and 1990 come from Meu Table A2 pp. 29 and 30. The age distribution for the Netherlands for 2000 comes from DK (1994).

Labor force figures for 1849, 1859, 1869, 1879, 1889, 1899, 1909, 1920, 1930, 1947, 1960, 1971, 1981 and 1991 come from Meu Table B1 p. 154. Labor force data for 2000 come from WDR.

Real GNP for 1849-1889 come from Mn. Real GNP for 1899-1993 come from Meu Table J1, pp. 911, 918 and 924. The 1960, 1970, 1980 and 1990 dollar values are from S&H online. The 1899-1947 dollar values are from the geometric average conversion rates for 1960, 1970 and 1980. Real GNP for 2000 comes from WDR. Physical capital investment rates come from the intraperiod averages of gross capital formation and gross income for 1921-1939, 1948-9 from Meu Table J1 p. 911. For the 1950-1998 period we used the intraperiod averages of real gross capital formation and real income from Meu Table J1 pp. 914 and 918 and WDR (various years). For the 1849-1920 period we used the average of the physical capital investment rates in Denmark and Germany over the same periods.

Enrollments in primary and secondary school from 1850-1993 come from Meu Table I1 pp. 871, 876, 883 and 889. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1849-1993 are from Meu Table I2 pp. 894, 896, 898 and 899.

New Zealand (1911-2000): Populations for 1911, 1921, 1926, 1936, 1945, 1951, 1961 and 1971

come from Maa Table A2 p. 30. The 1980 and 1990 are from Maa Table A5 p. 66. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1911, 1921, 1926, 1936, 1945, 1951, 1961, 1971, 1980 and 1990 come from Maa Table A2 p. 30. The age distribution for New Zealand for 1980 and 1990 are interpolated from 1971, 1981 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1911, 1921, 1926, 1936, 1945, 1951 is interpolated from 1945 and 1956, 1961, 1971, 1980 and 1990 come from Maa Table B1 p. 103. Labor force data for New Zealand for 1980 and 1990 are interpolated from 1971, 1981, 1986 and 1991 values. Labor force data for 2000 come from WDR.

Real GNPs for 1911, 1921 and 1926 come from Mn. Real GNPs for 1936-1993 come from Maa Table J1 pp. 1040 and 1042. The dollar values for 1951, 1961, 1971, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The dollar values for 1936 and 1945 come from the geometric average conversion rate for 1951, 1961 and 1971. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1939-1978 come from Maa Table J1, pp. 1040 and 1042; intraperiod average gross real capital formation and real income for 1979-1998 come from Maa Table J1 p. 1042 and WDR (various years). We used .12 for years prior to 1936.

Enrollments in school from 1878-1993 come from Maa Table I1 pp. 992 and 993. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-18 are secondary school age. Higher education enrollments for 1878-1993 come from Maa Table I2 p. 1006.

Norway (1855-2000): Populations for 1855, 1865, 1875, 1890, 1900, 1910, 1920, 1930, 1946, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 31. *Population for 2000 comes from Time Almanac 2001.*

The age distributions of the population for 1855, 1865, 1875, 1890, 1900, 1910, 1920, 1930, 1946, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 31. The age distribution for Norway for 2000 comes from DK.

Labor force figures for 1875, 1891, 1900, 1910, 1920, 1930, 1946, 1960, 1970, 1980 and 1990 come from Meu Table B1 p. 154. The 1865 and 1855 labor force data are extrapolations using the 1875 labor force participation rate. Labor force data for 2000 come from WDR.

Real GNP for 1855 is from Mn. Real GNPs for 1865-1993 come from Meu Table J1 pp. 907, 912, 918 and 924. The 1960, 1970, 1980 and 1990 dollar values are from S&H online. The 2000 value comes from WDR. The 1865-1950 values are from the geometric

average of the 1950, 1960 and 1970 conversion rates. Physical capital investment rate for 1855 is .09. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1865-1939, 1946-1998 from Meu Table J1, pp. 907, 912, 918 and 924 and WDR (various years).

Enrollments in primary and secondary school from 1853-1993 come from Meu Table I1 pp. 872, 877, 884 and 889. From 1875-1993 to calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1850-1993 are from Meu Table I2, pp. 894, 896, 898 and 899.

Portugal (1849-2000): Population for 1849, 1864, 1875, 1890, 1900, 1911, 1920, 1930, 1940, 1950, 1960, 1970, 1981, 1991 come from Meu Table A1 p. 7. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1849, 1864, 1875, 1890, 1900, 1911, 1920, 1930, 1940, 1950, 1960, 1970, 1981, 1990 come from Meu Table A2 p. 33 and 34. The 1849 data come from extrapolation of the age distribution for 1864. The age distribution for Portugal for 2000 comes from DK.

Labor force figures for 1890, 1900, 1911, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table B1 p. 155. The 1849, 1864, 1875 labor force data are extrapolations using the labor force participation rate for 1890. Labor force data for 2000 come from WDR.

Real GNPs for 1849-1940 are from Mn. Real GNPs for 1950-1993 are from Meu Table J1 pp. 919 and 925. The dollar values for 1950, 1960, 1970 and 1990 are from S&H online. The 2000 value is from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1953-1998 from Meu Table J1, p. 919 and 925 and WDR (various years). We used a physical capital investment rate of .09 for 1849-1950.

Enrollments in primary and secondary school from 1849-1993 come from Meu Table I1 pp. 872, 877, 884 and 889. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1849-1985 are from Meu Table I2 pp. 894, 896, 898 and 899.

Spain (1900-2000): Population for 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table A2 p. 36. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1981 and 1991 come from Meu Table A2 p. 36. The age distribution for Spain for 1991 is interpolated from 1981 and 1992 values. The age distribution for 2000 comes from DK.

Labor force figures for 1900, 1910, 1920, 1940, 1950, 1964, 1970, 1981 and 1991 come from Meu Table B1 p. 157. Labor force data for 2000 come from WDR.

Real GNPs for 1900-1993 come from Meu Table J1 pp. 912, 919 and 925. The 1950, 1960, 1970, 1980 and 1991 dollar values are from S&H online. The 1900-1940 values are from geometric average conversion rates using 1950, 1960 and 1970 values. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1954-1998 from Meu Table J1, pp. 919 and 925 and WDR (various years). We used a physical capital investment rate of .09 for 1900-1949, the average value of Italy over the 1861-1951 period.

Enrollments in primary, 1885, 1909, 1914, 1926, 1932-1993 and secondary school, 1914-1993 come from Meu Table I1 pp. 878, 885 and 889. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-17 are secondary school age. Higher education enrollments for 11884, 1914-1993 are from Meu Table I2 pp. 896, 898 and 899.

Sweden (1860-2000): Populations for 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940 1950 1960, 1970, 1980 and 1990 come from Meu Table A2 pp. 37-39. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940 1950 1960, 1970, 1980 and 1990 come from Meu Table A2 pp. 37-39. The age distribution for Sweden for 2000 comes from DK (1994).

Labor force figures for 1860, 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1945, 1950, 1960, 1970, 1980 and 1990 come from Meu Table B1 p. 158. Labor force data for 2000 come from WDR.

Real GNPs for 1860-1993 are from Meu Table J1 pp. 907, 913, 920 and 926. The 1950, 1960, 1970, 1980, 1990 dollar values are from S&H online. The 1860-1940 dollar values are from the geometric average conversion rate using 1950, 1960 and 1970 values. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1861-1998 from Meu Table J1, pp. 907, 913, 920 and 926 and WDR (various years).

Enrollments in primary, 1865, 1870, 1890, 1900-1993 and secondary school, 1888-1993 come from Meu Table I1 pp. 872, 878, 885 and 889. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. For the 1860 primary school enrollment rate we used .90, and the secondary enrollment rates for 1860, 1870 and 1880 we used .02, .02 and .0225. Higher education enrollments are from 1830, 1910-1993 from Meu Table I2 pp. 894, 896, 898 and 899.

Switzerland (1888-2000): Population for 1888, 1900, 1910, 1920, 1930, 1941, 1950, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 40. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1888, 1900, 1910, 1920, 1930, 1941, 1950, 1960, 1970, 1980 and 1990 come from Meu Table A2 p. 40. The age distribution for Switzerland for 2000 comes from DK (1994).

Labor force figures for 1890, 1900, 1910, 1920, 1930, 1941, 1950, 1960, 1970, 1980 and 1990 come from Meu Table B1 p. 159. Labor force data for 2000 come from WDR.

Real GNPs for 1888 and 1900 are from Mn. Real incomes for 1910-1993 are from Meu Table J1 pp. 913, 920 and 926. The 1950, 1960, 1970, 1980 and 1990 dollar values are from S&H online. The 1910-1941 dollar values are from the geometric average of conversion rates for 1950, 1960 and 1970. The 2000 real GNP is from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1950-1998 from Meu Table J1, pp. 920 and 926 and WDR (various years). We used the average physical capital investment rates for France and Germany over the overlapping periods for 1900-1950. We used .12 for the 1888 period.

Enrollments in primary and secondary school from 1887-1961 come from Meu Table I1 pp. 879, 885. To calculate enrollment rates, we assumed 6-12 are primary school age and 13-18 are secondary school age. We used the WDR of various years for the enrollment rates in 1970, 1980 and 1990. Higher education enrollments for 1886-1993 are from Meu Table I2 pp. 896, 898 and 899.

United Kingdom (1831-2000): Populations for England and Wales for 1831, 1841, 1851, 1861, 1871, 1881, 1891, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A1 p. 8. Population for UK for 2000 comes from *Time Almanac 2000*.

The age distributions of the population for England and Wales for 1831, 1841, 1851, 1861, 1871, 1881, 1891, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 pp. 41 and 42. The age distribution for 1831 is extrapolated from the age distribution in 1841. The age distribution in 2000 comes from DK.

Labor force figures for 1831, 1841, 1851, 1861, 1871, 1881, 1891, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Meu Table B1 p. 160. Labor force data for 1831 extrapolated from labor force participation rate in 1841. Labor force data for 2000 come from WDR.

Real GNP for 1831-1993 are from Meu Table J1 pp. 905, 907, 913, 921 and 926. The dollar values for 1951, 1961, 1971, 1981, 1991 are from S&H online. The 2000 value comes from WDR. The dollar values for 1831-1941 are from the geometric average conversion rate from 1951, 1961 and 1971. Physical capital investment rates come from

the intraperiod averages of gross real capital formation and real income for 1830-1998 from Meu Table J1, pp. 905, 907, 913, and 926 and WDR (various years).

Enrollments in primary, 1850-1993, and secondary school from 1904-1993 come from Meu Table I1 pp. 872, 879, 886 and 890. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. For secondary enrollment rates prior to 1911 we used .0006, .0011, .01, .01, .01, .015, .02 and .02. For primary enrollment rates in 1831 and 1841 we used .05 and .09. Higher education enrollments for 1922-1993 are from Meu Table I2 pp. 898 and 899. Prior to 1922 we used enrollment rates of .0002, .0004, .001, .001, .001, .002, .002, .002, .002.

United States (1870-2000): Populations for 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 6. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 comes from Mam Table A2 pp. 21-23. The age distribution for 2000 comes from *The Statistical Abstract of the United States 2000*.

Labor force figures for 1870, 1880, 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table B1 p. 107. The labor force for 2000 comes from the *Statistical Abstract of the United States 2000*.

Real GNP for 1870-1993 comes from Mam Table J1 pp. 762, 766 and 774. The dollar values for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 1870-1940 values come from the geometric average conversion rates for 1950, 1960 and 1970. The 2000 value comes from WDR. Physical capital investment rates from 1870-1928 come from Barro and Sala-i-Martin. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1929-1998 from Mam Table J1, pp. 766 and 774 and WDR (various years).

Enrollments in primary and secondary school from 1871-1993 come from Mam Table I1 pp. 718, 720, 724, 729 and 734. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. For 1860 enrollment rates we used information from Table H433-441 in the *Historical Statistics of the United States: Bicentennial Edition* pp. 369-370.

Southern Europe

Cyprus (1950-2000): Populations for 1950, 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years). The labor force for 1950 comes from the labor force participation rate in 1960.

Real GNPs for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 986. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 1003.

Greece (1910-2000): Populations for 1910, 1920, 1928, 1950, 1961, 1971, 1981 and 1991 come from Meu Table A2 pp. 24 and 25. The 1910 value is an interpolation from the 1907 and 1920 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1910, 1920, 1928, 1950, 1961, 1971, 1981 and 1991 come from Meu Table A2 pp. 24 and 25. The age distribution for 1910 is an interpolation from the 1907 and 1920 values. The age distribution for Greece for 2000 comes from DK.

The labor force figure for 1910 comes from extrapolating the 1928 value on labor force participation rate. Labor force figures for 1920, 1928, 1951, 1961, 1971, 1981, 1990 come from Meu Table B1 p. 151. Labor force data for 2000 come from WDR.

Real GNP for 1910 and 1920 are from Mn. Real GNP for 1928-1993 are from Meu Table J1 pp. 910, 916 and 923. Real GNP for 1996 comes from WDR. The 1950, 1961, 1971, 1980 and 1990 dollar values are from S&H online. The 2000 value comes from WDR. (The 1928 value is from the geometric average conversion rate for 1950, 1961 and 1971.) Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1949-1998 from Meu Table J1, pp. 916 and 923 and WDR (various years). We used physical capital investment rates from 1910-1928 from Italy over the same periods.

Enrollments in primary, 1901, 1910, 1926-1937, 1951-1993, and secondary school, 1926-1935, 1951-1993, come from Meu Table I1 pp. 875, 882 and 888. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1912-1993 are from Meu Table I2 pp. 895, 897 and 899. We used .00005 and .0001 for enrollment rates in higher education for 1900 and 1910.

Italy (1861-2000): Populations for 1861, 1871, 1881, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 pp. 28 and 29. The population for 1940 is the geometric interpolation from 1931 and 1951 years in Meu. Population for 2000 comes

from *Time Almanac 2001*.

The age distribution of the population for 1861, 1871, 1881, 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1991 come from Meu Table A2 pp. 28 and 29. The age distribution for 1940 uses geometric interpolation from 1931 and 1951 years in Meu. The age distribution for Italy for 2000 comes from DK.

Labor force figures for 1861, 1871, 1881, 1901, 1911, 1921, 1931, 1941, 1951, 1961, 1971, 1981 and 1991 come from Meu Table B1 p. 153. The labor force for 1861 is extrapolated from the labor force participation rate for 1871. Labor force data for 2000 come from WDR.

Real GNP for 1861-1993 come from Meu Table J1 pp. 907, 911, 917 and 924. The 1951, 1961, 1971, 1980 and 1990 dollar values are from S&H online. The 1861-1951 values are from the geometric average of the 1951, 1961 and 1971 conversion rates. The 2000 real GNP value comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1861-1998 from Meu Table J1, pp. 907, 911, 917 and 924 and WDR (various years).

Enrollments in primary and secondary school from 1861-1993 come from Meu Table I1 pp. 871, 876, 883 and 888.. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-18 are secondary school age. Higher education enrollments for 1861-1993 are from Meu Table I2 pp. 894, 896, 898 and 899.

Portugal (1849-2000): Population for 1849, 1864, 1875, 1890, 1900, 1911, 1920, 1930, 1940, 1950, 1960, 1970, 1981, 1991 come from Meu Table A1 p. 7. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1849, 1864, 1875, 1890, 1900, 1911, 1920, 1930, 1940, 1950, 1960, 1970, 1981, 1990 come from Meu Table A2 p. 33 and 34. The 1849 data come from extrapolation of the age distribution for 1864. The age distribution for Portugal for 2000 comes from DK.

Labor force figures for 1890, 1900, 1911, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table B1 p. 155. The 1849, 1864, 1875 labor force data are extrapolations using the labor force participation rate for 1890. Labor force data for 2000 come from WDR.

Real GNPs for 1849-1940 are from Mn. Real GNPs for 1950-1993 are from Meu Table J1 pp. 919 and 925. The dollar values for 1950, 1960, 1970 and 1990 are from S&H online. The 2000 value is from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1953-1998 from Meu Table J1, p. 919 and 925 and WDR (various years). We used a physical capital investment rate of .09 for 1849-1950.

Enrollments in primary and secondary school from 1849-1993 come from Meu Table I1 pp. 872, 877, 884 and 889. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1849-1985 are from Meu Table I2 pp. 894, 896, 898 and 899.

Spain (1900-2000): Population for 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1981 and 1990 come from Meu Table A2 p. 36. Population for 2000 comes from *Time Almanac 2001*.

The age distribution of the population for 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1981 and 1991 come from Meu Table A2 p. 36. The age distribution for Spain for 1991 is interpolated from 1981 and 1992 values. The age distribution for 2000 comes from DK.

Labor force figures for 1900, 1910, 1920, 1940, 1950, 1964, 1970, 1981 and 1991 come from Meu Table B1 p. 157. Labor force data for 2000 come from WDR.

Real GNPs for 1900-1993 come from Meu Table J1 pp. 912, 919 and 925. The 1950, 1960, 1970, 1980 and 1991 dollar values are from S&H online. The 1900-1940 values are from geometric average conversion rates using 1950, 1960 and 1970 values. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1954-1998 from Meu Table J1, pp. 919 and 925 and WDR (various years). We used a physical capital investment rate of .09 for 1900-1949, the average value of Italy over the 1861-1951 period.

Enrollments in primary, 1885, 1909, 1914, 1926, 1932-1993 and secondary school, 1914-1993 come from Meu Table I1 pp. 878, 885 and 889. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-17 are secondary school age. Higher education enrollments for 1884, 1914-1993 are from Meu Table I2 pp. 896, 898 and 899.

Turkey (1935-2000): Populations for 1935, 1945, 1950, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 27. The 1945 value is interpolated from the 1935 and 1950 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1935, 1945, 1950, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 27. The age distribution for Turkey for 1945 is interpolated from the 1935 and 1950 values. The age distribution for 2000 comes from DK.

Labor force figures for 1935, 1945, 1950, 1960, 1970, 1980 and 1990 come from Maa Table B1 p. 101. Labor force figures for Turkey 2000 come from WDR.

Real GNP for 1935 comes from Mn. Real GNPs for 1945-1993 comes from Maa Table

J1 pp. 1038. The 1945 value was converted from the current prices to constant prices using the consumer price index in Maa Table H2 p. 959. The dollar values for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 1945 value comes from the geometric average conversion rate for 1950, 1960 and 1970. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1950-1959 and the intraperiod average gross real capital formation and real income for 1960-1998 from Maa Table J1, p. 1038 and WDR (various years). We used .12 for the investment rate prior to 1950.

Enrollments in primary and secondary schools from 1925-1993 come from Maa Table I1 pp. 985 and 991. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1923-1993 come from Maa Table I2 pp. 1002 and 1005.

Central and Eastern Europe

Albania (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). We used the Yugoslavian capital per worker figure for 1990 for the physical capital figure for Albania. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Yugoslavian values in 1990, where the proportional constants are the different enrollment rates in 1990 between Albania and Yugoslavia. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Armenia (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from

WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Armenia and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Azerbaijan (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Azerbaijan and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Belarus (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from

WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Belarus and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Bulgaria (1934-2000): Populations for 1934, 1946, 1956, 1965 come from Meu Table A2 p. 15. Populations for 1970, 1980 and 1988 come from interpolations of 1965, 1975, 1985 and 1992 figures from Meu Table A2 p. 15. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1934, 1946, 1956, 1965 come from Meu Table A2 p. 15. Age distributions for 1970, 1980, 1988 and come from interpolations of 1965, 1975, 1985, 1992 figures from Meu Table A2 p. 15. Age distribution for 2000 comes from DK (1994).

Labor force figures for 1934, 1946, 1956, 1965, 1975, 1985 and 1992 come from Meu Table B1 p. 146. Labor force data for 2000 come from WDR.

Real GNP for 1934, 1946, 1956, 1965, 1970 come from Mn. Real GNP for 1980 and 1990 come from Mn. Real GNP for 2000 comes from WDR. Physical capital investment rates come from 1934-1980 is the average investment rate for Czechoslovakia and Poland over the same period. Physical capital investment rate from 1980-1992 comes from S&H online and WDR (various years).

Enrollments in primary and secondary school from 1890-1993 come from Meu Table I1 pp. 873, 880 and 887. To calculate enrollment rates, in 1956 we assumed 6-11 are primary school age and 12-17 are secondary school age. For 1965 we assumed 6-13 are primary school age and 14-17 are secondary school age, this was to maintain consistency with the 1956 numbers and the change in secondary school enrollment rates since 1970. Higher education enrollments for 1895-1993 are from Meu Table I2 pp. 895, 897 and 899.

Czechoslovakia (1921-2000): Populations for 1921, 1930, 1950, 1961, 1970, 1980 and 1990

come from Meu Table A2 p. 16. Population for Czech Republic 2000 comes from *Time Almanac 2000*.

The age distributions of the population for 1921, 1930, 1950, 1961, 1970, 1980 and 1990 come from Meu Table A2 p. 16. Age distribution for Czech Republic for 2000 comes from KF (1990).

Labor force figures for 1921, 1930, 1947, 1961, 1970, 1980, 1991 come from Meu Table B1 p. 147. Labor force data for 2000 come from WDR.

Real GNPs for 1921, 1930 and 1950 come from Meu Table J1 pp. 908 and 914. Real GNPs for 1961, 1970, 1980 and 1990 come from Meu Table J1 pp. 914 and 922 and converted into dollars from S&H online. Real GNP for 2000 comes from WDR. Real physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1920-1993 from Meu Table J1, pp. 908, 914 and 922 and WDR (various years).

Enrollments in primary and secondary school from 1921-1993 come from Meu Table I1 pp. 881 and 887. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments are for 1921-1993 are from Meu Table I2 pp. 897 and 899.

East Germany (1950-1988): Populations for 1950, 1964, 1971, 1981 come from Meu Table A1 p. 4. Population for 1988 come from S&H (1991).

The age distributions of the population for 1950, 1964, 1971, 1981 come from Meu Table A2 p. 23. Age distribution for 1990 comes from KF.

Labor force figures for 1950, 1961, 1971 come from Meu Table B1 p. 150. Labor force data for 1990 are from HDR. Labor force data for 1981 is interpolated from 1971 and 1990 values.

Real GNP for 1950-1988 come from Meu Table J1, pp. 916 and 923. The dollar value for 1971, 1980 and 1990 are from S&H online. (The 1950 and 1964 values are from the geometric average of the 1971, 1980 and 1988 conversion rates.) Physical capital investment rates and real income come from the intraperiod averages of gross capital formation and income for 1950-1993 from Meu Table J1, pp. 916 and 923. We used nominal values converted into our real international 1985 dollars because there was little evidence of sustained inflation in the entire East German series.

Enrollments in primary and secondary school for 1950-1989 are from Meu Table I1, p. 882 & 888. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1950-1988 are from Meu Table I2, pp. 897 and 899.

Estonia (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Estonia and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Georgia (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Georgia and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Hungary (1890-2000): Populations for 1890, 1900, 1910, 1920, 1930, 1941, 1949, 1960, 1970, 1980 and 1991 come from Meu Table A2 pp. 25 and 26. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1890, 1900, 1910, 1920, 1930, 1941, 1949, 1960, 1971, 1980 and 1991 come from Meu Table A2 pp. 25 and 26. The age distribution for Hungary for 2000 comes from DK.

Labor force figures for 1890, 1900, 1910, 1920, 1930, 1949, 1960, 1970, 1980 and 1990 come from Meu Table B1 p. 151. Labor force data for 2000 come from WDR.

Real GNP for 1890 comes from Mn. Real GNP for 1900-1993 come from Meu Table J1 pp. 910, 917 and 924. The 1970, 1980 and 1990 dollar values come from S&H online. The 2000 value comes from WDR. The 1900-1960 values are from the geometric average conversion rates of 1970, 1980 and 1990. The 1890-1910 physical capital investment rates are .12. The 1920 physical capital investment rate is from Austria-Hungary over the same period. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1925-1998 from Meu Table J1, pp. 910, 917 and 924 and WDR (various years).

Enrollments in primary and secondary school from 1875-1993 come from Meu Table I1 pp. 875, 883 and 888. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments are from 1875-1993 are from Meu Table I2 pp. 895, 897 and 899.

Kazakhstan (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different

enrollment rates in 1989/1990 between Kazakhstan and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Latvia (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Latvia and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Lithuania (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different

enrollment rates in 1989/1990 between Lithuania and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Moldova (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Moldova and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Poland (1931-2000): Population for 1931, 1950, 1960, 1970, 1980, 1991 come from Meu Table A2 p. 32. The 1980 and population is interpolated using 1978, 1991 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1931, 1950, 1960, 1970, 1980 and 1991 come from Meu Table A2 p. 32. The 1980 age distribution is interpolated using 1978 and 1991 values. The age distribution for Poland for 2000 comes from DK (1994).

Labor force figures for 1931, 1950, 1960, 1970, 1980 come from Meu Table B1 p. 155. The 1990 and 2000 values are from WDR (various years).

Real GNP for 1931 from Mn. Real GNPs for 1950-1993 come from Meu Table J1 pp. 918 and 925. The 1970, 1980 and 1990 dollar values are from S&H online. The 2000 value comes from WDR. The 1950 and 1960 dollar values are from the geometric average conversion rates for 1970, 1980 and 1990. Physical capital investment rates come from the intraperiod averages of gross real capital formation and real income for 1947-1998 from Meu Table J1, pp. 918 and 925 and WDR (various years). We used a physical capital investment rate of .2 for 1921 and 1931.

Enrollments in primary and secondary school from 1922-1937, 1945-1993 come from Meu Table I1 pp. 884 and 889. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1920-1993 are from Meu Table I2 pp. 898 and 899.

Romania (1930-2000): Populations for 1930, 1956, 1966, 1980 come from Meu Table A2 p. 34. The 1990 value is from S&H online. Population for 2000 comes from *Time Almanac 2000*.

The age distributions of the population for 1930, 1956, 1966, 1980 and 1990 come from Meu Table A2 p. 34. The age distribution for 1980 and 1990 are interpolations of the 1977 and 1993 values. The age distribution for Romania for 2000 comes from DK (1994).

Labor force figures for 1930, 1956, 1966, 1980 and 1990 come from Meu Table B1 p. 156. Labor force data for 1980, 1990 are interpolations using 1966 and 1992 values. Labor force data for 2000 come from WDR.

Real incomes for 1930 and 1956 come from Mn. Real incomes for 1966, 1980 and 1990 are from S&H online. The 2000 real GNP comes from WDR. We used a physical capital investment rate of .12 for 1930 and .2 for 1956. Physical capital investment rates for 1960-1998 are from S&H online and WDR (various years).

Enrollments in primary and secondary school from 1900-1993 come from Meu Table I1 pp. 877, 884 and 889. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1900-1993 are from Meu Table I2 pp. 896, 898 and 899.

Soviet Union/Russia (1917-2000): Population for 1917, 1926, 1939, 1959, 1970, 1989 come from Meu Table A1 p. 7. Population for Soviet Union in 1980 comes from S&H online at NBER. Population for Russia in 2000 comes from *Time Almanac 2000*.

The age distribution of the population for 1917, 1926, 1939, 1959, 1970, 1987 comes from Meu Table A2 p. 35. The 1917 value is an interpolation of the 1897 and 1926 values. The age distribution for 1980 and 2000 come from KF.

Labor force figures for 1917, 1927, 1959 and 1970 come from Meu Table B1 p. 156. Labor force data for 1917 and 1939 are interpolations of 1897 and 1926, and 1959 values. The 1980 labor force is from extrapolation of the 1970 labor force participation rate. Labor force data for 1987 comes from the HDR (1990). Labor force data for 2000 come from *Time Almanac 2000*.

Real GNPs for 1917-1959 are from Mn. The 1970, 1980 and 1987 values are from S&H online. The 2000 value is from WDR. Physical capital investment rates come from the

intra-period averages of gross real capital formation and real income for 1928-1998 from Meu Table J1, pp. 912, 919 and 925 and WDR (various years). We used a physical capital investment rate of .12 for 1900-1926.

Enrollment rates in primary, secondary and higher education for 1959, 1970, 1980, 1987 and 1996 are from WDR (various years). Enrollment rates prior to 1959 are from *Soviet Economic Facts 1970*.

Slovak Republic (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1990 observation for Czechoslovakia. The 2000 investment rate is the intra-period average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between the Slovak Republic and the Czechoslovakia. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Tajikistan (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intra-period average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50

percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Tajikstan and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Turkmenistan (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Turkmenistan and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Ukraine (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50

percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Ukraine and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Uzbekistan (1990-2000): Population for 1990 comes from WDR. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 2000 come from WDR.

Real GNPs for 1990 and 2000 come from WDR (various years). The 1990 physical capital stock was from the 1989 Soviet Union observation. The 2000 investment rate is the intraperiod average investment rate taken from WDR (various years).

Enrollments in primary and secondary schools for 1990 come from the Statistical Yearbook 1996, Table 9. We adjusted the enrollments in primary school to include 50 percent of the reported secondary enrollments, and we reduced the secondary enrollments by 50 percent. This was done to fit the 2000 enrollment rates reported in the WDR. We assumed the primary school and secondary school ages are 6-13 and 14-17. We assumed that the initial stocks of primary, secondary and tertiary human capital are proportional to the Soviet Union values in 1989, where the proportional constants are the different enrollment rates in 1989/1990 between Uzbekistan and the Soviet Union. The tertiary school enrollments are from the Statistical Yearbook 1996, Table 9.

Yugoslavia (1920-2000): Populations for 1920, 1930 and 1940 come from Mn. Populations for 1950, 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1921, 1931, 1961, 1971, 1981, 1990 come from Meu Table A2 p. 44. We interpolated using the 1931, 1948 and 1953 values in Meu Table A2 p. 44 to generate the 1941 and 1951 age distribution. The age distribution for 2000 comes from KF.

Labor force figures for 1921, 1931, 1961, 1971, 1981 come from Meu Table B1 p. 160. We interpolated using the 1948 and 1953 values to generate the 1941 and 1951 labor force observations. The 1990 observation comes from HDR 1994. The labor force figures for 2000 come from WDR.

Real GNPs for 1921, 1931, 1941 come from Mn. Real GNPs for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1920-1952 investment rates are for Italy over the same period and the intraperiod average investment rate taken from Meu Table J1 pp. 921 and 926, for 1953-1993 and WDR (various years).

Enrollments in primary and secondary schools for 1920-2000 come from Meu Table I1 p. 886 and 890. We assumed the primary school and secondary school ages are 6-9 and 10-17. The tertiary school enrollments are from Meu Table I2 pp. 898 and 899.

Newly Industrialized Countries

Hong Kong (1960-2000): Populations for 1960 and 1970 come from Maa Table A1 p. 7.

Populations for 1980 and 1990 come from S&H (1991). Population for 2000 comes from extrapolating DK population figure for 1993, using annual population growth rate from 1988-1993.

The age distributions of the population for 1961, 1970, 1980, 1990 and 2000 come from personal internet correspondence with Ms. Vivian Chan, for the Commissioner for Census and Statistics.

The labor force data for 1960 and 1970 come from WDR (various years). The labor force for 1980, 1990 and 2000 from personal correspondence with Ms. Vivian Chan, for the Commissioner for Census and Statistics.

Real GNPs for 1961-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1963-1975 from Maa Table J1, p. 1028 and from 1976-1998 from S&H online and WDR (various years). Prior to 1960 we used a physical capital investment rate of .2.

Enrollment rates for 1960, 1970, 1980, 1990 and 2000 come from personal internet correspondence with Education Department Rm 1420 Wu Chung, 213 Queen's Road East, Hong Kong.

Japan (1890-2000): Populations for 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 22. Population for 1890 comes from Maa Table A1 p. 8. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 22. The 1890 age distribution is interpolated from 1884 and 1893 values. The age distributions for Japan 2000 come from DK.

Labor force figures for 1890, 1900, 1910, 1920, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Maa Table B1 p. 97. Labor force figure for Japan 2000 come from

WDR

Real GNPs for 1890-1993 come from Maa Table J1 pp. 1025, 1026 and 1031. The dollar values for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The dollar values for 1890-1940 come from the geometric average conversion rate for 1950, 1960 and 1970. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1885-1998 from Maa Table J1, pp. 1025, 1026 and 1031 and WDR (various years).

Enrollments in primary and secondary schools from 1873-1993 come from Maa Table I1 pp. 981, 983 and 987. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1873-1993 come from Maa Table I2 pp. 1001 and 1004.

Singapore (1963-2000): Population for 1963 is geometrically interpolated from 1957 and 1970 from Maa Table A1 p. 9. Populations for 1970 and 1980 come from Maa Table A1 p. 9. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1963, 1970, 1980, 1990 and 2000 comes from KF.

The labor force for 1963 is interpolated from 1957, 1970, 1980 and 1989 come from Maa Table B1 p. 99. The labor force for Singapore 2000 comes from WDR.

Real GNPs for 1963-1993 come from Maa Table J1 p. 1036. The dollar values for this period come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1960-1998 from Maa Table J1, p. 1036 and WDR (various years).

Enrollments in primary and secondary schools from 1947-1993 come from Maa Table I1 pp. 985 and 990. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1951-1993 come from Maa Table I2 p. 1005.

South Korea (1910-2000): Populations for 1910 and 1920 come from Mn. Populations for 1940 and 1950 are geometrically interpolated from 1930, 1944 and 1960 from Maa Table A2 p. 23. Populations for 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 23. The 1990 value is interpolated from the 1980 and 1994 value. Population for 2000 comes from *Time Almanac 2001*.

The age distributions in 1910 and 1920 are extrapolated from the age distribution in 1930. The age distributions for 1940, 1950 are geometrically interpolated from 1930 and 1944 and 1960 from Maa Table A2 p. 23. The age distributions for South Korea for 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 23. The age distribution for

1990 is interpolated from the 1980 and 1994 values. The age distribution for South Korea in 2000 comes from DK.

Labor force figures for 1910, 1920, 1930 and 1940 come from the labor force participation rate in 1945. Labor force figures for 1945, 1960, 1970, 1980 come from Maa Table B1 p. 97. Labor force figures for the South Korea 1990 and 2000 come from WDR (various years).

Real GNPs for 1910-1940 come from Mn. Real GNPs for 1950-1993 come from Maa Table J1 p. 1032. The dollar values for 1950, 1960, 1975, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1911-1998 from Maa Table J1, pp. 1025, 1026 and 1032 and WDR (various years). We used .04 for the investment rate in 1910.

Enrollments in primary and secondary schools from 1910-1938 for Korea Maa Table I1 p. 983. For South Korea enrollments in primary and secondary schools from 1946-1993 come from Maa Table I1 p. 988. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1925-1993 come from Maa Table I2 pp. 1001 and 1004.

Taiwan (1905-2000): Populations for 1905, 1915, 1920, 1930, 1940, 1956, 1966, 1970 and 1980 come from Maa Table A2 p. 26. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1905, 1915, 1920, 1930, 1940, 1956, 1966, 1970 and 1980 come from Maa Table A2 p. 26. The age distribution for Taiwan for 1990 and 2000 come from DK.

Labor force figures for 1905, 1915, 1920, 1930, 1940, 1954, 1964, 1970, 1980 come from Maa Table B1 p. 100. Labor force figures for Taiwan 1990 and 2000 come from WDR (various years).

Real GNPs for 1905-1940 come from Mn. Real GNPs for 1956-1993 come from Maa Table J1 p. 1037. The dollar values for 1956, 1964, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1904-1998 from Maa Table J1, pp. 1025, 1026 and 1037 and WDR (various years).

Enrollments in schools from 1910-1937 and for primary and secondary schools from 1940-1993 come from Maa Table I1 pp. 985 and 991. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. For 1905, 1915, 1920 and 1930 we assumed that primary enrollments were the bulk of school enrollments. Higher education enrollments for 1920-1993 come from Maa Table I2 pp.

1002 and 1005.

Asia

Bangladesh (1970-2000): Population for 1960, 1970, 1980, 1990 come from KF. Population for 2000 comes from WDR.

The age distribution for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for Bangladesh 1974, 1981 and 1991 come from Maa Table B1 p. 95. Labor force figures for Bangladesh 2000 come from 1991 labor force participation rate.

Reals GNP for 1973-1990 come from Maa Table J1 p. 1027. We assumed a value of 215 thousand million taka for 1970 value, adjusting the 1973 value. The dollar values for 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross investment rates from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1947-1992 come from Maa Table I1 pp. 982 and 986. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-17 are secondary school age. Higher education enrollments for 1947-1993 come from Maa Table I2 p. 1003.

Cambodia (1980-2000): Populations for 1980 and 1990 come from WDR (various years). Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1980 and 2000 come from WDR.

Real GNPs for 1980, 1990 and 2000 come from WDR (various years). The 1980 value is imputed from the Bangladesh value. We assumed investment rates of 12 percent for 1980 and 1990 observations. The 2000 investment rate is from the intraperiod average investment rate taken from WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). The 1990 primary enrollment rate is assumed to be 80 percent, approximately equal to the enrollment rate in 1980. We assume primary school and secondary school ages are 6-11, 12-18. Tertiary enrollment rates are from WDR (various years).

China (1933-2000): Populations for 1953, 1982 and 1990 come from Maa Table A2 p. 19. Population for 1933, 1960 and 1970 come from Mn2. Population for 2000 comes from

Time Almanac 2001.

The age distributions of the population for 1953, 1982, and 1990 comes from Maa Table A2 p. 19. The age distribution for 1933 is extrapolated from the age distribution in 1953. The age distributions for 1960 and 1970 come from KF.

The labor force data for 1933 and 1953 come from Mn2. The labor force data for 1970 and 1982 come from WDR (various years). Labor force for 1960 comes from interpolation of the 1953 and 1970 values. Labor force for 1990 comes from the HDR, and the labor force for 2000 comes from the WDR.

Real GNPs for 1933 and 1953 come from Mn2. Real GNPs for 1960-1992 come from S&H online. Real GNP for 2000 comes from WDR. Physical capital investment rates from 1960-1998 come from S&H online at NBER web site and WDR (various years). Physical capital investment rates prior to 1960 come from Mn2 Table 3.9, p. 64.

Enrollment rates for the 1930s, 1953, 1982 and 1990 come from Mn2 Table 3.7, p. 63 and the age distribution of the population. Enrollment rates for 1960 and 1970 are from the World Development Report. Higher education enrollments for 1946-1993 come from Maa Table I2 p. 1003. Prior to 1946 enrollments come from Mn2 Table 3.7, p. 63.

Fiji (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 993. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from WDR (various years).

India (1901-2000): Populations for 1901, 1911, 1921, 1931, 1951, 1961, 1971 and 1981 come from Maa Table A2 pp. 19 and 20. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1990 come from Maa Table A2 pp. 19 and 20. The age distribution for India for 1990 is interpolated from 1981 and 1993 values. The age distribution for India for 2000 come from DK.

Labor force figures for 1901, 1911, 1921, 1931, 1951, 1961, 1971, 1981 and 1990 come from Maa Table B1 p. 95. Labor force figures for India for 1990 is interpolated from 1981 and 1991 values. Labor force figures for 2000 comes from WDR.

Real GNPs for 1901-1993 come from Maa Table J1 pp. 1025, 1026 and 1028. The dollar values for 1951, 1961, 1971, 1980 and 1990 come from S&H online. The 1901-1931 values are from geometric average conversion rate for 1951, 1961 and 1971. The 2000 value comes from WDR. For the 1891-1931 period we assumed an investment rate of .12. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1950-1993 from Maa Table J1, p. 1028 and WDR (various years).

Enrollments in primary and secondary schools from 1877-1993 come from Maa Table I1 pp. 980, 982 and 986. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1873-1986 come from Maa Table I2 pp. 1001 and 1003.

Indonesia (1951-2000): Populations for 1951, 1961, 1971 and 1980 come from Maa Table A1 p. 7. The population for 1951 is interpolated from the 1930 and 1961 values. Population for 1990 from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1961, 1971 and 1980 come from Maa Table A2 p.20. The age distribution for 1951 is extrapolated from the age distribution of 1961. The age distribution for Indonesia for 1990 and 2000 come from DK.

Labor force figures for 1961, 1971 and 1980 comes from Maa Table B1 p. 96. Labor force for 1951 is extrapolated from the labor force participation rate for 1961. Labor force figures for Indonesia for 1990 and 2000 come from WDR (various years).

Real GNPs for 1951, 1961, 1971, 1980 and 1990 come from Maa Table J1 p. 1029. The 1951 value comes from converting the nominal value into a real value using the consumer price index in Maa Table H2 p. 958. The dollar values for 1961, 1971, 1980 and 1990 come from S&H online. The dollar value for 1951 comes from the geometric average conversion rate for 1961, 1971 and 1980. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1951-1957 and the intraperiod average gross real capital formation and real income for 1958-1998 from Maa Table J1, p. 1029 and WDR (various years).

Enrollments in primary and secondary schools from 1876-1938, 1954-1992 come from Maa Table I1 pp. 980, 982 and 987. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1920-1993 come from Maa Table I2 pp. 1001 and 1003.

Laos (1980-2000): Populations for 1980 comes from WDR. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1980 and 2000 come from WDR.

Real GNPs for 1980 and 2000 come from WDR (various years). The 1980 value is imputed from the Bangladesh value. The 1990 value comes from S&H online. We assumed an investment rate of 12 percent for the 1980 value. The 1990 investment rate comes from the intraperiod average investment rate from S&H online. The 2000 investment rate is the intraperiod average investment rates taken from WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). We assumed that primary school and secondary school ages are 6-10 and 11-16. Tertiary school enrollment rates are from WDR (various years).

Malaysia (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 988. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 1004.

Myanmar (1941-2000): Populations for 1941, 1951, 1961 come from Mn. Population for 1973 and 1983 come from Maa Table A1 p. 9. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1941, 1951, 1973 and 1983 come from Maa Table A2 p. 24. The 1941, 1951 and 1961 values are extrapolated from the 1931 age distribution. The age distribution for Myanmar 2000 comes from DK.

Labor force figures for 1983 come from Maa Table B1 p. 98. Labor force for 1941, 1951

are extrapolated from 1961 labor force participation rate. The labor force for 1961 and 1973 and 2000 are from WDR (various years).

Real GNPs for 1947-1993 come from Maa Table J1 p. 1033. The 1941 value uses the 1947 value. The dollar values for 1951, 1961, 1973 and 1983 come from S&H online. The 1947 dollar value comes from the geometric average conversion rate for 1951, 1961 and 1973. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1947-1962 and the intraperiod average gross real capital formation and real income for 1963-1998 from Maa Table J1, pp. 1033 and WDR (various years). For the 1941 observation we used .12.

Enrollments in primary and secondary schools from 1870-1993 come from Maa Table I1 pp. 981, 984 and 988. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-16 are secondary school age. Higher education enrollments for 1894-1993 come from Maa Table I2 pp. 1001, 1002 and 1004.

Nepal (1960-2000): Populations for 1960, 1970, 1980, 1986 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1986 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980, 1986 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1986 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 989. We assumed the primary school and secondary school ages are 6-10 and 11-15. The tertiary school enrollments are from WDR (various years).

Pakistan (1951-2000): Populations for 1951, 1961, 1972 and 1981 come from Maa Table A2 p. 24. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1951, 1961, 1972 and 1981 comes from Maa Table A2 p. 24. The age distributions for Pakistan 1990 and 2000 come from DK.

Labor force figures for 1951, 1961, 1972, 1981 come from Maa Table B1 p. 98. Labor force data for Pakistan 1990 and 2000 come from WDR (various years).

Real GNPs for 1951, 1961, 1972, 1981 and 1990 come from Maa Table J1 p. 1034. The dollar values for the aforementioned years come from S&H online. The 2000 value

comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1959-1998 from Maa Table J1, p. 1034 and WDR (various years). For the 1951 observation we used .12 for the physical capital investment rate.

Enrollments in primary and secondary schools from 1947-1993 come from M (1983) Table I1 pp. 984 and 989. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1947-1993 come from Maa Table I2 p. 1004.

Papua New Guinea (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 993. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from WDR (various years).

Philippines (1939-2000): Populations for 1939, 1948, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 25. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1939, 1948, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 25. The age distribution for the Philippines 1990 is interpolated from 1980 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1939, 1948, 1960, 1970, 1975, 1980 and 1990 come from Maa Table B1 p. 98. Labor force figures for the Philippines 1980 and 1990 are interpolated from 1975 and 1993 values. Labor force figure for 2000 comes from WDR.

Real GNP for 1939 comes from Mn. Real GNPs for 1948-1993 come from Maa Table J1 p. 1035. The dollar values for 1960, 1970, 1976, 1980 and 1990 come from S&H online. The dollar value for 1948 comes from the geometric average conversion rate for 1960, 1970 and 1976. The dollar value for 2000 comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1946-1998 from Maa Table J1, p. 1035 and WDR (various years).

Enrollments in primary and secondary schools from 1910-1993 come from Maa Table I1 pp. 984 and 989. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1910-1993 come from Maa Table I2 pp. 1002 and 1005.

Sri Lanka (1946-2000): Populations for 1946, 1953, 1963, 1971, 1981 and 1991 from Maa Table A1 p. 9. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1946, 1953, 1963, 1971, 1981 and 1991 come from Maa Table A2 p. 25. The age distribution for Sri Lanka for 2000 comes from KF.

Labor force figures for 1946, 1953, 1963, 1971, 1981 come from Maa Table B1 p. 99. Labor force figures for Sri Lanka 1991 and 2000 come from WDR (various years).

Real GNPs for 1946-1993 come from Maa Table J1 p. 1036. The 1946 value comes from the 1947 nominal value converted to a real value using the consumer price index in Maa Table H2 p. 959. The dollar values for 1953, 1963, 1971, 1981 and 1991 come from S&H online. The dollar value for 1946 comes from the geometric average conversion rate for 1953, 1963 and 1971. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1950-1990 and 1994-1998 come from Maa Table J1, p. 1036 and WDR (various years). Prior to 1950 and for the 1991-1993 period we used the intraperiod average gross capital formation and income for 1947-1949 from Maa Table J1, p. 1036.

Enrollments in schools from 1910-1993 come from Maa Table I1 p. 985 and 990. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1921-1990 come from Maa Table I2 pp. 1002 and 1005.

Thailand (1937-2000): Populations for 1937, 1947, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 27. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1937, 1947, 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 27. The age distribution for Thailand for 1990 is interpolated from 1980 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1937 1947, 1960, 1970, 1980 and 1990 come from Maa Table B1 p. 101. Labor force figure for Thailand 2000 comes from WDR.

Real GNPs for 1937 and 1947 come from Mn. Real GNPs for 1960-1993 come from Maa Table J1 p. 1038. Dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1957-1998 from Maa Table J1, p. 1038 and WDR (various years). We used the intraperiod average gross capital formation and

income for 1952-1956. We used the investment rates of .12 for 1937 and 1947.

Enrollments in primary and secondary schools from 1913-1993 come from Maa Table I1 pp. 985 and 991. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1915-1993 come from Maa Table I2 pp. 1002 and 1005.

Vietnam (1980-2000): Populations for 1980 and 1990 come from WDR (various years). Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1980 and 2000 come from WDR.

Real GNP for 1980, 1990 and 2000 come from WDR (various years). The 1980 value is imputed from the value for China. We assumed investment rates of 12 percent for 1980 and 1990 observations. The 2000 investment rate is from the intraperiod average investment rate taken from WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). We assumed that primary school and secondary school ages are 6-10 and 11-17. Tertiary enrollment rates are from WDR (various years).

Sub-Saharan Africa

Angola (1960-2000): Populations for 1960, 1970 come from Maa Table A1 p. 3. Populations for 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distribution for 1960 come from Maa Table A2 p. 14. The age distributions for Angola for 1970, 1980, 1990 and 2000 comes from KF.

Labor force figures for 1960 come from Maa Table B1 p. 90. Labor force figures for Angola for 1970, 1980, 1990 and 2000 come from WDR (various years).

Real GNPs for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1950-1991 come from Maa Table I1 p. 973. To calculate enrollment rates, we assumed 6-9 are primary school age and 10-15 are secondary school age. Higher education enrollments for 1978-1992 come from Maa Table I2 p. 997. Prior to 1978 we assume an enrollment rate of 0 for higher education.

Benin (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 973. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Botswana (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for 1990. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-12 and 13-17. The tertiary school enrollments are from WDR (various years).

Burkina Faso (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 973. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Burundi (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 973. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Cameroon (1960-2000): Populations for 1960, 1970, 1980, 1990 come from KF. Population for 2000 comes from *Time Almanac 2000*.

The age distributions for 1960, 1970, 1980, 1980, 1990 and 2000 come from KF.

Labor force figures for Cameroon for 1980 and 1990 come from Maa Table B1 p. 90. The labor force for 1960 and 1970 come from the labor force participation rate in 1980. The labor force for 2000 comes from the labor force participation rate for 1990.

Real GNPs for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1950-1993 come from Maa Table I1 p. 973. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-18 are secondary school age. Higher education enrollments for 1967-1990 come from Maa Table I2 p. 997. Prior to 1967 we assume an enrollment rate of .001 for higher education.

Central African Republic (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 974. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Chad (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 974. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Congo (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 974. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 997.

Cote de Ivoire (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online.

Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 975. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 998.

Ethiopia (1950-2000): Populations for 1950, 1960, 1970, 1980 and 1990 come from KF. Population for 2000 comes from *Time Almanac 2000*.

The age distributions for 1950, 1960, 1980, 1990 and 2000 come from KF.

Labor force figures for 1960, 1980 and 2000 come from WDR (various years). The labor force for 1950 comes from the 1960 labor force participation rate. The labor force for 1970 and 1990 come from interpolation of the 1960, 1980 and 2000 values.

Real GNP for 1950 comes from S&H online. Real GNPs for 1960-1993 come from Maa Table J1 p. 1014. The dollar values for 1960, 1970 and 1980 come from S&H online. The 1990 value comes from geometric average conversion rate for 1960, 1970 and 1980. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1948-1993 come from Maa Table I1 pp. 968 and 974. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1955-1991 come from Maa Table I2 p. 998. Prior to 1955 we assume an enrollment rate of 0 for higher education.

Gabon (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 974. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 998.

Gambia, The (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from WDR (various years).

Ghana (1960-2000): Populations for 1960 and 1970 come from Maa Table A2 p. 15. Populations for 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960 and 1970 come from Maa Table A2 p. 15. The age distributions for Ghana for 1980, 1990 and 2000 come from KF.

Labor force figures for 1970 and 1990 and 2000 come from WDR (various years). Labor force figures for Ghana for 1960 and 1980 come from Maa Table B1 p. 91.

Real GNPs for 1960-1993 comes from Maa Table J1 p. 1014. The dollar values for Ghana for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1959-1986 and 1994-1998 and average gross capital formation and income for 1987-1993 from Maa Table J1, p. 1014 and WDR (various years).

Enrollments in primary and secondary schools from 1913-1993 come from M (1992) Table I1 pp. 969 and 975. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1949-

1990 come from Maa Table I2 p. 998.

Guinea (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 975. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 998 and WDR (various years).

Guinea-Bissau (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-11 and 12-16. The tertiary school enrollments are from WDR (various years).

Kenya (1962-2000): Populations for 1962, 1969 and 1979 come from Maa Table A2 p. 15. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1962, 1969, 1979 and 1990 come from Maa Table A2 p. 15. The age distribution for Kenya for 2000 comes from DK.

Labor force figures for 1960, 1970, 1980, 1990 and 2000 come from WDR (various years).

Real GNPs for 1962-1993 come from Maa Table J1 p. 1015. The dollar values for 1962-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1964-1988 from Maa Table J1, p. 1015 and for 1994-1998 from WDR (various years). For the 1962 observation we used the average gross capital formation and income for 1957-1961 from Maa Table J1 p. 1015.

Enrollments in primary and secondary schools from 1935-1993 come from Maa Table I1 pp. 969 and 975. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1960-1992 come from Maa Table I2 p. 998.

Lesotho (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-12 and 13-17. The tertiary school enrollments are from WDR (various years).

Liberia (1960-2000): Populations for 1960, 1970, 1980, 1990 come from KF. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1962, 1974 and 1984 come from Maa Table B1 p. 92. Labor force figures for Liberia for 1990 and 2000 come from the labor force participation rate of 1980.

Real GNP for 1965-1990 come from Maa Table J1 p. 1016. We assumed a 1960 real value of 200 million Liberian dollars, a similar growth rate over the 1965-1975 period. The dollar values for 1960, 1970 and 1980 come from S&H online. The dollar value for 1990 comes from the geometric average conversion rate for 1960, 1970 and 1980. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average real gross physical capital and real income for 1965-1989 come from Maa Table J1 1016 and for 1994-1998 from WDR (various years). We assumed an

investment rate of .2 for the 1960 observation.

Enrollments in primary and secondary schools from 1950-1986 come from Maa Table I1 p. 975. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1973-1993 come from Maa Table I2 p. 998. Prior to 1973 we assume an enrollment rates of .0001 and .0005 for higher education.

Madagascar (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from Maa Table I1 p. 976. We assumed the primary school and secondary school ages are 6-10 and 11-17. The tertiary school enrollments are from Maa Table I2 p. 998.

Malawi (1960-2000): Populations for 1960, 1970, 1980, 1990 come from KF. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1977 and 1987 come from Maa Table B1 p. 92. The 1960, 1970 labor force figures come from the 1980 labor force participation rate. Labor force figures for Malawi for 1980 and 2000 come from WDR (various years).

Real GNPs for 1960-1993 come from Maa Table J1 p. 1017. The dollar values for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average real gross physical capital and real income for 1955-1998 from Maa Table J1 p. 1017 and WDR (various years).

Enrollments in primary and secondary schools from 1945-1993 come from Maa Table I1 pp. 969 and 976. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1966-1990 come from Maa Table I2 p. 998. Prior to 1966 we assume an enrollment rates of .0001 and .0005 for higher education.

Mali (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 976. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 999.

Mauritania (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 976. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 999.

Mauritius (1960-2000): Populations for 1960, 1970, 1980, 1990 come from KF. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1962, 1972 and 1990 come from Maa Table B1 p. 92. Labor force figures for Mauritius for 1980 are interpolated from 1972 and 1990 values. The labor force for 2000 comes from the labor force participation rate of 1990.

Real GNPs for 1960-1993 come from Maa Table J1 p. 1018. The dollar values for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross physical

capital and income for 1960-1998 from Maa Table J1 p. 1018 and WDR (various years).

Enrollments in primary and secondary schools from 1950-1993 come from Maa Table I1 p. 976. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-18 are secondary school age. Higher education enrollments for 1967-1991 come from Maa Table I2 p. 999. Prior to 1967 we assume an enrollment rates of .005 for higher education.

Mozambique (1960-2000): Populations for 1960, 1970 and 1980 come from Maa Table A1 p. 4. Population for 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 16. The age distribution for 1990 is interpolated from 1980 and 1995 values. The age distribution for Mozambique for 2000 comes from KF.

Labor force figures for 1970 and 1980 come from Maa Table B1 p. 93. The labor force data for 1960, 1990 and 2000 come from WDR.

Real GNPs for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1950-1992 come from Maa Table I1 p. 977. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-17 are secondary school age. Higher education enrollments for 1976-1992 come from Maa Table I2 p. 999. Prior to 1976 we assume an enrollment rate of 0 for higher education.

Namibia (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-12 and 13-17. The tertiary school enrollments are from WDR (various years).

Niger (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. The 1990 value is from 1989. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 977. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 999.

Nigeria (1952-2000): Population for 1963 comes from Maa Table A2 p. 17. Populations for 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distribution for 1963 come from Maa Table A2 p. 17. The age distributions for Nigeria for 1970, 1980, 1990 and 2000 come from DK.

Labor force figures for Nigeria for 1960, 1970 1980, 1990 and 2000 come from WDR (various years).

Real GNPs for 1952-1993 come from Maa Table J1 p. 1019. The dollar values for 1952, 1963, 1972, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1951-1998 from Maa Table J1, p. 1019 and WDR (various years).

Enrollments in primary and secondary schools from 1944-1993 come from Maa Table I1 p. 970 and 977. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1964-1993 come from Maa Table I2 p. 999. We used .0005 for the higher education enrollment rate for 1952.

Rwanda (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from KF. Population for 2000 comes from *Time Almanac 2000*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for Rwanda for 1978 and 1989 come from Maa Table B1 p. 93. Labor force data for 1960 and 2000 come from WDR. Labor force figures for Nigeria 1970 is interpolated from 1960 and 1978 values.

Real GNPs for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1960-1998 from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1960-1991 come from Maa Table I1 p. 977. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-19 are secondary school age. Higher education enrollments for 1967-1990 come from Maa Table I2 p. 999. We used 0 for the higher education enrollment rate prior to 1967.

Senegal (1970-2000): Populations for 1970, 1980 and 1990 come from KF. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for Senegal 1980 and 2000 come from WDR (various years). Labor force figures for Senegal for 1970 is from the 1980 labor force participation rate. The labor force for 1990 is interpolated from 1980 and 2000 values.

Real GNPs for 1970-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1968-1969 and the intraperiod average gross real capital formation and real income for 1970-1998 from Maa Table J1, p. 1020 and WDR (various years).

Enrollments in primary and secondary schools from 1950-1992 come from Maa Table I1 p. 977. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-18 are secondary school age. Higher education enrollments for 1949-1993 come from Maa Table I2 p. 999.

Sierra Leone (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1961 value for the 1960 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average

investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 977. We assumed the primary school and secondary school ages are 6-12 and 13-19. The tertiary school enrollments are from Maa Table I2 p. 999.

Somalia (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 978. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 1000.

South Africa (1946-2000): Population for 1951 is geometrically interpolated from 1946 and 1960 from Maa Table A2 p. 17. Populations for 1960, 1970 and 1980 comes from Maa Table A2 p. 17. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distribution for 1951 is geometrically interpolated from 1946 and 1960 from Maa Table A2 p. 17. The age distributions for South Africa for 1960, 1970, 1980 and 1990 come from Maa Table A2 p. 17. The age distribution for South Africa 2000 comes from DK.

Labor force figures for South Africa 1946, 1951, 1960, 1970 and 1980 from Maa Table B1 p. 93. Labor force figures for South Africa for 1990 and 2000 come from WDR (various years).

Real GNPs for 1946-1993 come from Maa Table J1 pp. 1010 and 1021. The dollar values for 1951, 1960, 1970, 1980 and 1990 come from S&H online. The dollar value for 1946 comes from the geometric average conversion rate for 1951, 1960 and 1970. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1953-1992, 1994-1998 and the intraperiod average gross capital formation and income from 1950-1952

from Maa Table J1, p. 1021 and WDR (various years). We used .16 for the investment rate for 1946.

Enrollments in primary and secondary schools from 1934-1993 come from Maa Table I1 pp. 971 and 978. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Prior to 1960 we assumed that 75 percent of European students were primary students, 80 percent of Coloured and Asian students were primary students and 95 percent of Native students were primary students. From 1960 onward we assumed that two thirds of European students were primary students, 75 percent of Coloured and Asian students were primary students and 90 percent of Native students were primary students. For 1980 and 1988 we used 99 percent enrollment rate for primary school and 25 percent and 50 percent for secondary enrollment rates. These match our data in 1970 and 1996. Higher education enrollments for 1934-1993 come from Maa Table I2 pp. 996 and 1000.

Sudan (1970-2000): Populations for 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 978. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 1000.

Tanzania (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1988 value for the 1990 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1988 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 978. We assumed the primary school and secondary school ages are 6-12 and 13-18. The tertiary school enrollments are from Maa Table I2 p. 1000.

Togo (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 978. We assumed the primary school and secondary school ages are 6-11 and 12-18. The tertiary school enrollments are from Maa Table I2 p. 1000.

Uganda (1959-2000): Populations for 1959, 1969, 1980 come from Maa Table A1 p. 6. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1959, 1969 and 1990 come from Maa Table A2 p. 18. The 1990 value is interpolated from the 1969 and 1991 values. The age distributions for Uganda for 1980 and 2000 come from KF.

Labor force figures for 1960, 1970, 1980, 1990 and 2000 come from WDR (various years).

Real GNPs for 1960-1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1950-1993 come from Maa Table I1 p. 979. To calculate enrollment rates, we assumed 6-12 are primary school age and 13-18 are secondary school age. Higher education enrollments for 1965-1992 come from Maa Table I2 p. 1000. Prior to 1965 we assume an enrollment rate of 0 for higher education.

Zaire (1950-2000): Populations for 1950, 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years). The labor force for 1950 comes from the labor force participation rate in 1960.

Real GNPs for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 979. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 1000.

Zambia (1950-2000): Population for 1950 comes from Maa Table A1 p. 6. Populations for 1960 and 1990 come from S&H online. Populations for 1969 and 1980 comes from Maa Table A2 p. 18. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1969 and 1980 come from Maa Table B1 p. 94. Labor force figure for 1950 comes from the labor force participation rate in 1960. The 1960, 1990 and 2000 labor force data come from WDR (various years).

Real GNPs for 1950-1990 come from Maa Table J1 p. 1024. The dollar values for 1960, 1969, 1980 and 1990 come from S&H online. The real value for 1950 comes from converting the nominal value to a real value using the consumer price index in Maa Table H2 p. 954. The dollar value comes from the geometric average conversion rate for 1960, 1969 and 1980. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1954-1990 and average intraperiod gross capital formation and income for 1950-1953 and 1991-1998 from Maa Table K1, p. 1024 and WDR (various years).

Enrollments in primary and secondary schools from 1940-1993 come from Maa Table I1 pp. 972 and 979. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1967-1990 come from Maa Table I2 p. 1000. For 1950 and 1960 we used higher education enrollment rates of .0005 and .005.

Zimbabwe (1950-2000): Population for 1950 comes from Maa Table A1 p. 6. Populations for 1960 and 1990 come from S&H online. Populations for 1969 and 1980 comes from Maa Table A2 p. 18. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1969, 1980 and 1988 come from Maa Table A2 p. 18. The 1980

and 1990 age distributions are interpolated from the 1969, 1982 and 1994 values. The age distributions for 1960 and 2000 are from DK. The age distribution in 1950 is extrapolated from the 1960 age distribution.

The labor force figures for 1960, 1970, 1980, 1990 and 2000 come from WDR (various years). Labor force for 1950 comes from extrapolation of the 1960 labor force participation rate.

Real GNPs for 1950-1990 come from Maa Table J1 p. 1024. The 1950 value comes from converting the nominal value into a real value using the consumer price index in Maa Table H2 p. 954. The dollar values for 1960, 1969, 1980 and 1990 come from S&H online. The 1950 value comes from the geometric average conversion rate of 1960, 1969 and 1980. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1954-1989 and 1994-1998, and intraperiod average gross capital formation and income for 1950-1953 from Maa Table J1, p. 1024 and WDR (various years).

Enrollments in primary and secondary schools from 1940-1993 come from Maa Table I1 pp. 972 and 979. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1965-1992 come from Maa Table I2 p. 1000. We used higher education enrollment rates of .0005 and .001 for the period prior to 1965.

North Africa

Algeria (1948-2000): Populations for 1948, 1954, 1966, 1980, 1987 come from Maa Table A2 p. 14. Population for 1948 and 1980 are interpolated from 1936 and 1954, 1966 and 1987 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1948, 1954, 1966, 1980 and 1987 come from Maa Table A2 p. 14. The age distribution for Algeria for 1980 is interpolated from 1966 and 1987 values. The age distribution for 2000 comes from DK.

Labor force figures for 1948, 1954, 1966, 1980 and 1987 come from Maa Table B1 p. 90. Labor force figures for Algeria 2000 come from WDR.

Real GNPs for 1948-1993 come from Maa Table J1 p. 1010. The dollar values for 1966, 1980 and 1987 come from S&H online. The dollar values for 1948 and 1954 come the geometric average conversion rate for 1966, 1980 and 1987. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1950-1998 from Maa Table J1, p. 1010 and WDR (various years).

Enrollments in primary and secondary schools from 1910-1993 come from Maa Table I1

pp. 968 and 973. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1910-1993 come from Maa Table I2 pp. 996 and 997.

Egypt (1917-2000): Populations for 1917, 1927, 1937, 1947, 1960, 1966 and 1975 come from Maa Table A2 p. 15. Population for 1966 is geometrically interpolated from 1960 and 1975 values. Populations for 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1917, 1927, 1937, 1947, 1960 and 1975 come from Maa Table A2 p. 15. The age distributions for Egypt for 1966, 1980, 1990 are interpolated from 1960, 1975, 1992 values. The age distribution for 2000 comes from DK.

Labor force figures for 1917, 1927, 1937, 1947, 1960, 1966, 1976 and 1986 come from Maa Table B1 p. 91. Labor force figures for Egypt 2000 comes from WDR.

Real GNPs for 1917, 1927 and 1937 come from Mn. Real GNPs for 1947-1993 come from Maa Table J1 pp. 1013. The dollar values for 1960, 1966, 1975, 1980 and 1990 come from S&H online. The dollar values for 1947 comes from the geometric average conversion rate for 1960, 1966 and 1975. The 2000 value comes from WDR. Prior to 1947 we used the .05 for the investment rate. After 1947 we used the intraperiod average investment rate from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1910-1993 come from Maa Table I1 pp. 968 and 974. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1910-1993 come from Maa Table I2 pp. 996 and 997.

Libya (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from Maa Table A5 p 53. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970 and 1980 come from Maa Table J1 p. 1016. The dollar value for 1980 comes from WDR. The 1990 value comes from WDR based on 3 percent per year decline in real per capita income from 1980-1990. The dollar values for 1960 and 1970 use the 1980 conversion rate. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from Maa Table J1 p. 1016 and WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR

(various years). We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from WDR (various years).

Morocco (1951-2000): Populations for 1951, 1960, 1971 and 1980 come from Maa Table A2 p. 16. Population for 1990 comes from online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1951, 1960, 1971, 1980 and 1990 come from Maa Table A2 p. 16. The age distribution for Morocco for 1980 and 1990 are interpolations using 1971, 1982 and 1993. The age distribution for 2000 comes from DK.

Labor force figures for 1952, 1960, 1971 and 1982 come from Maa Table B1 p. 92. Labor force figures for Morocco for 1990 and 2000 from WDR (various years).

Real GNPs for 1951-1993 come from Maa Table J1 p. 1018. The dollar values for 1951, 1960, 1971, 1982 and 1990 come from S&H online. The 2000 value comes from WDR. Physical capital investment rates for 1960-1998 come from the intraperiod average investment rates from S&H online and WDR (various years). We used .09 for the 1951 observation.

Enrollments in primary and secondary schools from 1914-1993 come from Maa Table I1 pp. 970 and 976. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1914-1993 come from Maa Table I2 pp. 996 and 999.

Tunisia (1956-2000): Populations for 1956, 1966 comes from Maa Table A2 p. 18. Population for 1973 is geometrically interpolated from 1966 and 1984 from Maa Table A2 p. 18. Populations for 1981 and 1990 come from S&H (1991). Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1956 and 1966 come from Maa Table A2 p. 18. The age distribution for Tunisia 1973 is geometrically interpolated from 1966 and 1984 from Maa Table A1 p. 18. The age distributions for Tunisia for 1990 and 2000 come from DK.

Labor force figures for Tunisia 1956, 1966, 1975, 1984 and 1990 come from Maa Table B1 p. 94. Labor force figures for Tunisia 2000 comes from WDR.

Real GNPs for 1956, 1966, 1973, 1981 and 1990 come from Maa Table J1 p. 1022. The dollar values for 1966, 1973, 1981 and 1990 are from S&H online. The 1956 value comes from the geometric average conversion rate for 1966, 1973 and 1981. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rates from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1945-1993 come from Maa Table I1

p. 972 and 979. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1943-1993 come from Maa Table I2 p. 996 and 1000.

Middle East

Iran (1956-2000): Populations for 1956, 1966, 1971 and 1981 come from Maa Table A2 p. 21. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1956, 1966, 1971, 1980 and 1990 come from Maa Table A2 p.21. The age distribution for Iran for 1980 and 1990 are interpolated from 1971, 1986 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1956, 1966, 1976 and 1986 comes from Maa Table B1 p. 96. Labor force figures for Iran 2000 come from WDR.

Real GNPs for 1956, 1966, 1971, 1980 and 1990 come from Maa Table J1 p. 1029. The 1956 value uses the 1959 value. The dollar values for the above come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1955-1990 and intraperiod average gross capital formation and income for 1991-1998 from Maa Table J1, p. 1029 and WDR (various years).

Enrollments in primary and secondary schools from 1930-1993 come from Maa Table I1 pp. 983 and 987. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1948-1991 come from Maa Table I2 p. 1003.

Iraq (1950-2000): Populations for 1950, 1957, 1965 and 1977 comes from Maa Table A1 p. 8. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distribution for 1957, 1965, 1977 and 1990 come from Maa Table A2 p.21. The age distribution for 1950 is extrapolated from the age distribution in 1957. The age distribution for Iraq for 2000 come from DK.

Labor force figures for 1957, 1977 and 1987 come from Maa Table B1 p. 96. Labor force for Iraq for 1965 is interpolated from the 1957 and 1977 figures. Labor force figure for Iraq 1950 is extrapolated from the 1957 labor force participation rate. Labor force figure for Iraq 2000 comes from WDR.

Real GNPs for 1950, 1957, 1965 , 1977 and 1990 come from Maa Table J1 p. 1030. The

dollar values for 1957, 1965, 1977 and 1990 come from S&H online. The dollar value for 1950 comes from the geometric average conversion rate for 1957, 1965 and 1977. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1950-1998 from Maa Table J1, p. 1030 and WDR (various years). We used the value of .12 for the investment rate in the 1950 observation.

Enrollments in primary and secondary schools from 1927-1993 come from Maa Table I1 pp. 983 and 987. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1940-1988 come from Maa Table I2 pp. 1001 and 1003.

Israel (1948-2000): Populations for 1948, 1961 and 1972 comes from Maa Table A1 p. 8. Populations for 1956, 1980 and 1990 come from S&H (1991). Population for 2000 comes from *Time Almanac 2001*.

The age distribution for 1948, 1956, 1961, 1972 comes from KF. The age distribution for Israel for 1980, 1990 and 2000 come from DK.

Labor force figures for 1948, 1956, 1961, 1972 and 1983 come from Maa Table B1 p. 96. Labor force data for Israel 1990 and 2000 come from WDR (various years).

Real GNPs for 1948-1993 come from Maa Table J1 p. 1030. The 1948 value uses the 1950 value. The dollar values for 1956, 1961, 1972, 1980 and 1990 come from S&H online. The dollar value for 1948 comes from the geometric average conversion rate for 1956, 1961 and 1972. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1950-1954 and the intraperiod average gross real capital formation and real income for 1955-1998 from M (1992) Table J1, p. 1030 and WDR (various years). We used .12 for the 1948 observation.

Enrollments in primary and secondary schools from 1950-1993 come from Maa Table I1 p. 987. We used the 1950 enrollment rate for the 1948 observation. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1945-1993 come from Maa Table I2 p. 1004.

Jordan (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 987. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 1004.

Kuwait (1980-2000): Populations for 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1980 and 2000 come from WDR (various years).

Real GNPs for 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1980-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates in primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-9 and 10-17. The tertiary school enrollments are from WDR (various years).

Oman (1970-2000): Populations for 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from WDR (various years).

Saudi Arabia (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. Population for 2000 comes from *Time*

Almanac 2001.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from WDR (various years). The labor force for 1950 comes from the labor force participation rate in 1960.

Real GNPs for 1950, 1960, 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Maa Table I1 p. 990. We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from Maa Table I2 p. 1005.

Syria (1953-2000): Populations for 1953, 1960, 1970 and 1981 from Maa Table A1 p. 9. Population in 1953 is interpolated from 1946 and 1960 values. Population for 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1981 and 1991 come from Maa Table A2 p. 26. The age distribution for 1953 is extrapolated from the age distribution in 1960. The age distributions for 1981 and 1991 are interpolated from the age distributions in 1970 and 1992. The age distribution for Syria for 2000 comes from DK.

Labor force figures for 1960, 1970, 1981 and 1991 come from Maa Table B1 p. 99. Labor force for Syria in 1953 is extrapolated from the labor force participation rate in 1960. Labor force figures for Syria 2000 come from WDR.

Real GNPs for 1953-1993 come from Maa Table J1 p. 1037. The dollar values for 1960, 1970, 1981 and 1991 come from S&H online. The dollar value for 1953 comes from the geometric average conversion rate for 1960, 1970 and 1981. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average investment rate for 1953-1998 from S&H online and WDR (various years).

Enrollments in primary and secondary schools from 1937-1993 come from Maa Table I1 pp. 985 and 990. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollment rates for 1937-1992 come from Maa Table I2 p. 1002 and 1005.

United Arab Emirates (1980-2000): Populations for 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1980 and 2000 come from WDR (various years).

Real GNPs for 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1980-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-11 and 12-17. The tertiary school enrollments are from WDR (various years).

Yemen (1970-2000): Populations for 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1970, 1980 and 2000 come from WDR (various years).

Real GNPs for 1970, 1980 and 1990 come from S&H online. We used the 1989 value for the 1990 observation. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollment rates for primary and secondary schools for 1960-2000 come from WDR (various years). We assumed the primary school and secondary school ages are 6-13 and 14-19. The tertiary school enrollments are from WDR (various years).

Latin America

Argentina (1895-2000): Populations for 1895, 1914, 1947, 1960, 1970, 1980 and 1991 come from Mam Table A1 p. 7. Population for 1922 and 1935 are geometrically interpolated from 1914 and 1947. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1895, 1914, 1947, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 24. The age distribution for 2000 comes from DK.

Labor force figures for 1895, 1914, 1947, 1960, 1970 and 1980 come from Mam Table B1 p. 108. Labor force data for Argentina for 1990 and 2000 are from WDR.

Real GNPs for 1900-1993 come from Mam Table J1 pp. 775 and 776. We used the 1900 value to calculate the 1895 value. The dollar values for 1960, 1970, 1980 and 1990 are from S&H online. The 1895-1950 values are from the geometric average conversion rate for 1960, 1970 and 1980. The 2000 value is from WDR. Prior to 1915 we used .09 for physical capital investment rates. Physical capital investment rates come the intraperiod average gross real capital formation and real income for (1900-1998) from Mam Table J1, pp. 775, 776 and 782 and WDR (various years).

Enrollments in primary and secondary school from 1882, 1892-1993 come from Mam Table I1 pp. 735, 736, 738, 742 and 746. To calculate enrollment rates, we assumed 6-12 are primary school age and 13-17 are secondary school age. Higher education enrollments for 1885-1992 are from Mam Table I2 pp. 755, 756 and 757.

Bolivia (1950-2000): Populations for 1950 and 1976 come from Mam Table A1 p. 7. Population for 1962 is geometrically interpolated. Population for 1980 and 1990 comes from S&H (1991). Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1976 and 1990 come from Mam Table A2 p. 24. The age distribution for 1962 is geometrically interpolated. The age distribution for 1980 and 1996 comes from DK (1994).

Labor force figures for 1950, 1976 and 1991 come from Mam Table B1 p. 108. Labor force data for 1962 is geometrically interpolated. Labor force data for Bolivia for 1980 is from WDR. Labor force data for 2000 come from DK.

Real GNPs for 1950-1993 come from Mam Table J1 pp. 776 and 782. The dollar values are from S&H online. The 2000 value is from WDR. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1950-1998 from Mam Table J1, p. 776 and 782 and WDR (various years).

Enrollments in primary and secondary school from 1901, 1923, 1950-1993 come from Mam Table I1 pp. 736, 738, 742 and 746. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1901-1990 are from Mam Table I2 pp. 755, 756 and 757.

Brazil (1872-2000): Populations for 1872, 1889, 1900, 1920, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 7. Population for 1906, 1928 are geometrically interpolated. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1872, 1889, 1900, 1920, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 25. The age distribution for Brazil for 2000 comes from DK.

Labor force figures for 1872, 1900, 1920, 1940, 1950, 1960, 1970, 1980 and 1990 come

from Mam Table B1 p. 108. Labor force data for 2000 come from WDR.

Real GNPs for 1872-1993 are from Mam Table J1 pp. 775, 777 and 782. The dollar values for 1950, 1960, 1970, 1980 and 1990 are from S&H online. The 2000 value comes from WDR. The 1872-1940 values are from the geometric average conversion rate for 1950, 1960 and 1970. Prior to 1948 we used .09 for physical capital investment rates. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1948-1998 from Mam Table J1, pp. 777 and 782 and WDR (various years).

Enrollments in primary and secondary school from 1871, 1906, 1927-1993 come from Mam Table I1 pp. 735, 736, 738, 742 and 746. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-16 are secondary school age. Higher education enrollments for 1907-1993 come from Mam Table I2 pp. 755, 756 and 757. Prior to 1907 we used higher education enrollment rates of 0 and .001.

Chile (1895-2000): Populations for 1895, 1907, 1920, 1930, 1940, 1952, 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 7. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1895, 1907, 1920, 1930, 1940, 1952, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 26. The age distribution for 1980 and 1990 are interpolated using 1970 and 1982 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1920, 1930, 1940, 1952, 1960, 1970, 1980 and 1990 come from Mam Table B1 p. 109. Labor force for 1895 and 1907 are extrapolated using the labor force participation rate for 1920. Labor force data for 1980 are interpolated from 1970 and 1982 data. Labor force data for 2000 come from WDR.

Real GNP for 1895 comes from Mn. Real GNPs for 1907-1993 come from Mam Table J1 pp. 775, 777 and 782. The dollar values for 1952, 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The dollar values for 1907-1940 come from geometric average conversion rate for 1952, 1960 and 1970. Prior to 1940 we used .09 for physical capital investment rates. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1940-1998 from Mam Table J1, pp. 777 and 782 and WDR (various years).

Enrollments in primary and secondary school from 1880-1993 come from Mam Table I1 pp. 735, 736, 739, 743 and 747. To calculate enrollment rates, we assumed 6-13 are primary school age and 14-17 are secondary school age. Higher education enrollments for 1886-1993 are from Mam Table I2 pp. 755, 756 and 757.

Colombia (1917-2000): Populations for 1917, 1938, 1951, 1964 and 1973 come from Mam

Table A1 p. 7. Population for 1980 and 1990 comes from S&H (1991). Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1917, 1938, 1951, 1964, 1973, 1980 and 1990 come from Mam Table A2 p. 27. The age distribution for Colombia for 1980 and 1990 are interpolations using 1973, 1985 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1938, 1951, 1964 and 1970 come from M(1983) Table B1 p. 109. Labor force for 1917 is extrapolated from the labor force participation rate in 1938. Labor force data for Colombia for 1980, 1990 and 2000 are from WDR (various years).

Real GNPs for 1925-1993 come from Mam Table J1 pp. 775, 778 and 783. The 1917 value comes from the 1925 income. The 1951, 1964, 1973, 1980 and 1990 dollar values are from S&H online. The 1917 and 1938 values are from geometric conversion rates for 1951, 1964 and 1973. The 2000 value is from WDR. Prior to 1925 we used .09 for physical capital investment rate. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1925-1998 from Mam Table J1, pp. 775, 778 and 783 and WDR (various years).

Enrollments in primary and secondary school from 1915-1993 come from Mam Table I1 pp. 739, 743 and 747. To calculate enrollment rates, we assumed 6-10 are primary school age and 11-16 are secondary school age. Higher education enrollments for 1914-1991 are from Mam Table I2 pp. 755, 756 and 757.

Costa Rica (1951-2000): Populations for 1950, 1963, 1973, 1980, 1990 come from Mam Table A2 p. 12. Population for 1980 is interpolated using 1973 and 1990 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1963, 1973, 1980 and 1990 come from Mam Table A2 p. 12. The age distribution for Costa Rica for 1980 is interpolated from the 1973 and 1990 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1963, 1973, 1980 and 1990 come from Mam Table B1 p. 102. Labor force data for 1980, 1990 are interpolations from 1973, 1984 and 1993. Labor force data for 2000 come from WDR.

Real GNPs for 1950-1993 come from Mam Table J1 p. 767. The dollar values are from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1966-1998 from Mam Table J1, p. 767 and WDR (various years). Physical capital investment rates come from the intraperiod average gross capital formation and income for 1950-1962 from Mam Table J1, p. 767.

Enrollments in primary and secondary school from 1910-1993 come from Mam Table J1 pp. 719, 721, 725 and 730. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1951-1993 are from Mam Table I2 pp. 752 and 754.

Dominican Republic (1950-2000): Populations for 1950, 1960, 1970, 1980, 1990 come from Mam Table A2 p. 13. Population for 1980 is interpolated using the 1970 and 1990 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 13. The age distribution for Dominican Republic for 1980 is interpolated using the 1970 and 1990 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1960, 1970, 1981 come from Mam Table B1 p. 103. Labor force data for 1990 and 2000 are from WDR.

Real GNPs for 1950-1993 come from Mam Table J1 p. 768. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1950-1998 from Mam Table J1, p. 768 and WDR (various years).

Enrollments in primary and secondary school from 1935-1993 come from Mam Table I1 pp. 721, 726 and 731. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1935-1985 are from Table I2 pp. 752 and 754. For 1988 and 1996 we used enrollment rates from WDR (various years).

Ecuador (1950-2000): Populations for 1950, 1962, 1974, 1980 and 1988 come from Mam Table A1 p. 7. Population for 1980 and 1990 are from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1962, 1974, 1980 and 1990 come from Mam Table A2 p. 27. The age distribution for Ecuador for 1980 and 1990 are interpolations using 1974, 1982 and 1991. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1962, 1974, 1980 and 1990 come from Mam Table B1 p. 109. Labor force data for Ecuador for 1980 are interpolated from 1974 and 1982 values. Labor force data for 2000 come from WDR.

Real GNPs for 1950-1993 are from Mam Table J1 p. 778 and 783. The dollar values are from S&H online. The 2000 value is from WDR. For 1950 we used the value of .09 for physical capital investment. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1950-1998 from Mam Table J1,

pp. 778 and 783 and WDR (various years).

Enrollments in primary and secondary school from 1928-1992 come from Mam Table I1 pp. 739, 743 and 747. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1928-1989 are from Mam Table I2 pp. 756 and 757.

El Salvador (1950-2000): Populations for 1950, 1961, 1971, 1981 and 1991 come from Mam Table A2 p. 13. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1961, 1971, 1981 and 1991 come from Mam Table A2 p. 13. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1961, 1971 come from Mam Table B1 p. 103. Labor force data for El Salvador for 1980, 1991 and 2000 are from WDR (various years).

Real GNPs for 1951-1993 are from Mam Table J1 p. 769. Dollar values are from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1951-1998 from Mam Table J1, p. 769 and WDR (various years).

Enrollments in primary and secondary school from 1942-1993 come from Mam Table I1 pp. 722, 726 and 731. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1944-1991 come from Mam Table I2 pp. 752 and 754.

Guatemala (1950-2000): Populations for 1950, 1964, 1973, 1980 and 1991 come from Mam Table A2 p. 14. Population for 1980 is interpolated using 1973, 1981 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1964, 1973, 1980 and 1991 come from Mam Table A2 p. 14. The age distribution for Guatemala for 1980 is interpolated using 1973, 1981 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1964, 1973, 1981 come from Mam Table B1 p. 103. Labor force data for Guatemala for 1991 and 2000 are from WDR.

Real GNPs for 1950-1993 come from Mam Table J1 p. 769. The dollar values are from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1946-1998 from Mam Table J1, p. 769 and WDR (various years).

Enrollments in primary and secondary school from 1931-1993 come from Mam Table I1 pp. 722, 726 and 731. To calculate enrollment rates, we assumed 6-11 are primary

school age and 12-17 are secondary school age. Higher education enrollments for 1950-1986 are from Mam Table I2 pp. 752 and 754. Higher education enrollment rates for 1988 and 1996 are from WDR (various years).

Guyana (1946-2000): Populations for 1946, 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 7. Population for 2000 comes from *Time Almanac 2000*.

The age distributions of the population for 1946, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 28. The age distribution for 2000 comes from KF.

Labor force figures for 1946, 1960 and 1980 come from Mam Table B1 p. 110. Labor force data for Guyana for 1970, 1990 and 2000 are from WDR (various years).

Real GNPs for 1946-1993 come from Mam Table J1 pp. 779, 783. The 1946 value comes from 1952 nominal value adjusted to a real value using consumer price index in Mam Table H2 p. 713. The conversion rate was the geometric average of 1960, 1970 and 1980 values. The 2000 value comes from WDR. We used .15 for the physical capital investment rate in 1946. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1960-1998 from Mam Table J1, pp. 779 and 783 and WDR (various years).

Enrollments in primary, 1921-1988, and secondary school, 1948-1986, come from Mam Table I1 pp. 740, 744 and 748. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1964-1993 are from Mam Table I2 p. 757. For years prior to 1964 we used enrollment rates of .001.

Haiti (1950-2000): Populations for 1950, 1971, 1980 and 1991 come from Mam Table A2 p. 15. Population for 1980 is interpolated using 1972 and 1982 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1971, 1980 and 1991 come from Mam Table A2 p. 15. The age distribution for Haiti for 1980 is interpolated using the 1972 and 1982 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1971, 1980 and 1991 come from Mam Table B1 p. 103. Labor force data for Haiti for 1980 are interpolated of 1971 and 1982 values. Labor force data for 2000 come from WDR.

Real GNPs for 1950-1993 are from Mam Table J1 p. 770. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1955-1962 from Mam Table J1, p. 770. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1963-1998 from Mam Table J1,

p. 770 and WDR (various years).

Enrollments in primary and secondary school from 1940-1992 come from Mam Table J1 pp. 722, 727 and 732. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollment rates for Haiti come from WDR (various years).

Honduras (1930-2000): Populations for 1930, 1940, 1950, 1961, 1974, 1980 and 1990 come from Mam Table A1 p. 4. The 1980 value is interpolated from the 1974 and 1990 value. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1930, 1940, 1950, 1961, 1974, 1980 and 1990 come from Mam Table A2 p. 15. The age distribution for Honduras for 1980 is interpolated using 1974 and 1990 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1961, 1974, 1980 and 1990 come from Mam Table B1 p. 104. Labor force data for Honduras for 1980 are interpolated using 1974 and 1990 values. Labor force data for 2000 come from DK.

Real GNPs for 1930-1993 are from Mam Table J1 pp. 764 and 770. The 1950, 1961, 1974, 1980 and 1990 dollar values are from S&H online. The 1930 and 1940 values come from the geometric average conversion rate using 1950, 1961 and 1974 rates. The 2000 value comes from WDR. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1925-1998 from Mam Table J1, pp. 764 and 770 and WDR (various years).

Enrollments in primary, 1919-1993, and secondary school 1922-1993 come from Mam Table I1 pp. 722, 727 and 732. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1922-1992 are from Mam Table I2 pp. 751, 752 and 754.

Jamaica (1953-2000): Populations for 1953, 1960, 1970 and 1991 come from Mam Table A1 p. 5. Population for 1980 is from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1953, 1960, 1970, 1980 and 1991 come from Mam Table A2 p. 16. The age distribution for Jamaica for 1980 is interpolated using 1970 and 1982 values. The age distribution for 2000 comes from KF.

Labor force figures for 1953, 1963, 1973, 1980 and 1990 come from Mam Table B1 p. 104. Labor force data for Jamaica for 1980 are interpolated using 1973 and 1982 values. Labor force data for 2000 come from WDR.

Real GNPs for 1953-1993 come from Mam Table J1 p. 771. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates from the intraperiod average gross real capital formation and real income for 1953-1988 and from 1989-1998 we used the average gross capital formation and income. Mam Table J1, p. 771 and WDR (various years). Prior to 1953, for the physical capital investment rate, we used the intraperiod average gross capital formation and income for 1950-1952.

Enrollments in primary and secondary school from 1942-1991 come from Mam Table I1 pp. 723, 727 and 732. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1948-1992 are from Mam Table I2 pp. 753 and 754.

Mexico (1895-2000): Populations for 1895, 1900, 1910, 1921, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 17. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1895, 1900, 1910, 1921, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 17. The age distribution for Mexico for 2000 comes from DK (1994).

Labor force figures for 1900, 1910, 1921, 1930, 1940, 1950, 1960, 1970, 1980 and 1990 come from Mam Table B1 p. 105. Labor force data for 2000 come from DK.

Real GNPs for 1895-1993 come from Mam Table J1 pp. 762, 764 and 771. The dollar values for 1950, 1960, 1970, 1980 and 1990 come from S&H online. The dollar values for 1895-1940 come from the geometric average conversion rate for 1950, 1960 and 1970. The 2000 value comes from WDR. Prior to 1939, we used .1 for the physical capital investment rates, the average of the following two periods. Physical capital investment rates come the intraperiod average gross capital formation and income for 1939-1959 from Mam Table J1, pp. 764 and 771. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1960-1998 from Mam Table J1, p. 771 and WDR (various years).

Enrollments in primary and secondary school from 1895, 1907, 1927-1993 come from Mam Table I1 pp. 720, 723, 728 and 733. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1923-1993 come from Mam Table I2 pp. 751, 753 and 754. We used .001, .001 and .003 for higher education enrollment rates prior to 1923.

Nicaragua (1950-2000): Populations for 1950, 1963, 1971, 1980 and 1991 come from Mam Table A2 p. 18. Population for 1980 is interpolated using 1971 and 1991 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1963, 1971, 1980 and 1991 come from Mam Table A2 p. 18. The age distribution for Nicaragua for 1980 is interpolated using 1971 and 1991 values. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1963 and 1971 come from Mam Table B1 p. 106. Labor force data for Nicaragua for 1980, 1990 and 2000 are from WDR (various years).

Real GNPs for 1950-1990 come from Mam Table J1 p. 772. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1945-1975 from Mam Table J1, pp. 765 and 772. Physical capital investment rates for 1976-1998 are from S&H online and WDR (various years).

Enrollments in primary and secondary school from 1938, 1950-1993 come from Mam Table I1 pp. 723, 728 and 733. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1944-1992 are from Mam Table I2 pp. 753 and 754.

Panama (1950-2000): Populations for 1950, 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 5. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1950, 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 18. The age distribution for 2000 comes from KF.

Labor force figures for 1950, 1960, 1970, 1980 and 1990 come from Mam Table B1 p. 106. Labor force data for 2000 come from DK.

Real GNP for 1950-1993 come from Mam Table J1 p. 772. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come the intraperiod average gross real capital formation and real income for 1946-1998 from Mam Table J1, pp. 765 and 772 and WDR (various years).

Enrollments in primary and secondary school from 1930-1993 come from Mam Table I1 pp. 724, 728 and 733. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1945-1993 are from Mam Table I2 pp. 753 and 754.

Paraguay (1939-2000): Populations for 1939, 1950, 1962, 1972, 1980 and 1990 come from Mam Table A1 p. 8. Population for 1980 and 1990 are interpolated from 1972, 1982 and 1991 values. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1939, 1950, 1962, 1972, 1980 and 1990 come from Mam Table A2 p. 28. The age distribution for Paraguay for 1936 is extrapolated from 1950. The age distribution 1980 and 1990 is interpolated from 1972, 1982 and 1991

values. The age distribution for 2000 comes from WDR.

Labor force figures for 1950, 1962, 1972, 1980 and 1990 come from Mam Table B1 p. 110. Labor force for 1939 is extrapolated using the labor force participation rate for 1950. Labor force data for Paraguay for 1980 and 1990 are interpolated from 1972, 1982 and 1994 values. Labor force data for 2000 come from WDR.

Real GNPs for 1939-1988 come from Mam Table J1 pp. 779 and 783. For dollar values for 1950, 1961, 1972, 1980 and 1990 come from S&H online. The dollar value for 1939 comes from the geometric average conversion rate for 1950, 1961 and 1972. The 2000 value comes from WDR. We used .12 for the physical capital investment rate for 1929-1949. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1953-1998 from Mam Table J1, pp. 779 and 783 and WDR (various years).

Enrollments in primary, 1915-1993, and secondary school, 1915-1993, come from Mam Table I1 pp. 740, 744 and 748. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1915-1993 are from Mam Table I2 pp. 755, 756 and 757.

Peru (1908-2000): Populations for 1908, 1919, 1930, 1960, 1972, 1981 and 1991 come from Mam Table A1 p. 8. The 1908, 1919 and 1930 populations are interpolations using 1876 and 1940 values. 1. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1908, 1919, 1930, 1940, 1960, 1972, 1980 and 1990 come from Mam Table A2 p. 29. The age distribution for Peru for 1908, 1919 and 1930 are extrapolations of the age distribution in 1940. The age distribution for Peru for 1980 and 1990 are interpolations of the 1972, 1981 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1908, 1919, 1930, 1940, 1961, 1972, 1980 and 1990 come from Mam Table B1 p. 110. Labor force for 1908, 1919 and 1930 are extrapolations using the labor force participation rate for 1940. Labor force data for Peru for 1980 and 1990 are interpolations of 1972, 1981 and 1991 values. Labor force data for 2000 come from WDR.

Real GNPs for 1908, 1919 and 1930 are from Mn. Real GNPs for 1940-1988 are from Mam Table J1 pp. 780 and 784. The 1940 value comes from the nominal 1942 value converted to real value using the consumer price index in Mam Table H2 p. 705. The dollar values for 1960, 1972, 1980 and 1990 are from S&H online. The 2000 value comes from WDR. The 1940 value is converted using the geometric average conversion rates for 1960, 1972 and 1980. We used .09 for physical capital investment rates prior to 1942. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1942-1950, and physical capital investment rates come from

the intraperiod average gross real capital formation and real income for 1950-1998 from Mam Table J1, pp. 780 and 784 and WDR (various years).

Enrollments in primary and secondary school from 1898-1993 come from Mam Table I1 pp. 737, 740, 744 and 748. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-16 are secondary school age. Higher education enrollments for 1898-1993 are from Mam Table I2 pp. 755, 756 and 757.

Puerto Rico (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions for 1950, 1960, 1970, 1980, 1990 and 2000 come from KF.

Labor force figures for 1990 come from HDR. Labor force figures for 1960, 1970, 1980 and 2000 come from Statistical Abstracts of the United States (various years).

Real GNPs for 1960, 1970, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1960-2000 investment rates are the intraperiod average investment rate taken from S&H online and WDR (various years).

Enrollments in primary and secondary schools for 1960-2000 come from Mam Table I1 pp. 729 and 734. We assumed the primary school and secondary school ages are 6-13 and 14-17. The tertiary school enrollments are from Mam Table I2 pp. 753 and 754.

Trinidad & Tobago (1960-2000): Populations for 1960, 1970, 1980 and 1990 come from Mam Table A1 p. 6. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1960, 1970, 1980 and 1990 come from Mam Table A2 p. 20. The age distribution for 2000 comes from KF.

Labor force figures for 1960, 1971, 1980 and 1990 come from Mam Table B1 p. 107. Labor force data for Trinidad & Tobago for 1990 is interpolated from the 1980 and 1993 values. Labor force data for 2000 come from DK.

Real GNPs for 1960-1993 come from Mam Table J1 p. 773. The dollar values come from S&H online. The 2000 value comes from WDR. Physical capital investment rates come from the intraperiod average gross capital formation and income for 1951-1974 from Mam Table J1, p. 773. Physical capital investment rates for 1975-1998 come from the intraperiod average gross real capital formation and real income Mam Table J1, p. 773 and WDR (various years).

Enrollments in primary and secondary school from 1931-1993 come from Mam Table I1 pp. 724, 729 and 734. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1964-

1993 are from Mam Table I2 pp. 753 and 754. Prior to 1960 we used enrollment rates for higher education of .001, .001 and .004.

Uruguay (1939-2000): Populations for 1939 and 1949 are interpolated from 1908 and 1963 come from Mam Table A1 p. 8. Populations for 1963 and 1975 come from Mam Table A1 p. 8. Populations for 1980 and 1990 comes from S&H online. Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1939, 1949 are interpolated from 1908 and 1963 from Mam Table A2 p. 30. The age distribution for 1963 and 1975 come from Mam Table A2 p. 30. The age distribution for Uruguay for 1980 and 1990 is interpolated from the 1975, 1985 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1963, 1975, 1980 and 1990 come from Mam Table B1 p. 110. Labor force for 1939, 1949 are extrapolated using the labor force participation rate of 1963. Labor force data for Uruguay for 1980 and 1990 are interpolated from 1975, 1985 and 1992 values. Labor force data for 2000 come from WDR.

Real GNPs for 1939-1991 come from Mam Table J1 pp. 780 and 784. The dollar values for 1961, 1975, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. The 1939 and 1949 values are converted using the geometric average for 1961, 1975 and 1980 values. Prior to 1949 we used .12 for physical capital investment rates. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1955-1998 from Mam Table J1, pp. 780 and 784 and WDR (various years).

Enrollments in primary and secondary school from 1879-1993 come from Mam Table I1 pp. 735, 737, 741, 745 and 749. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-17 are secondary school age. Higher education enrollments for 1886-1992 are from Mam Table I2 pp. 755, 756 and 757.

Venezuela (1936-2000): Population for 1936, 1941, 1950, 1961 and 1971 come from Mam Table A1 p. 8. Population for 1980 and 1990 comes from S&H (1991). Population for 2000 comes from *Time Almanac 2001*.

The age distributions of the population for 1936, 1941, 1950, 1961, 1971, 1980 and 1990 come from Mam Table A2 p. 30. The age distribution for Venezuela for 1980 and 1990 are interpolations using the 1971, 1981 and 1991 values. The age distribution for 2000 comes from DK.

Labor force figures for 1941, 1950, 1961, 1971, 1980 and 1990 come from Mam Table B1 p. 110. Labor force data for 1936 is extrapolated from the labor force participation rate for 1941. Labor force data for Venezuela for 1980 and 1990 are interpolated from the 1971, 1981 and 1991 values. Labor force data for 2000 come from WDR.

Real GNPs for 1936 and 1941 come from Mn. Real GNPs for 1950-1993 come from Mam Table J1 pp. 781 and 785. The dollar values for 1950, 1961, 1971, 1980 and 1990 come from S&H online. The 2000 value comes from WDR. Prior to 1950 we used .12 for physical capital investment rate. Physical capital investment rates come from the intraperiod average gross real capital formation and real income for 1950-1998 from Mam Table J1, pp. 781 and 785 and WDR (various years).

Enrollments in primary and secondary school from 1926-1993 come from Mam Table I1 pp. 741, 745 and 749. To calculate enrollment rates, we assumed 6-11 are primary school age and 12-16 are secondary school age. Higher education enrollments for 1926-1991 are from Mam Table I2 pp. 756 and 757.