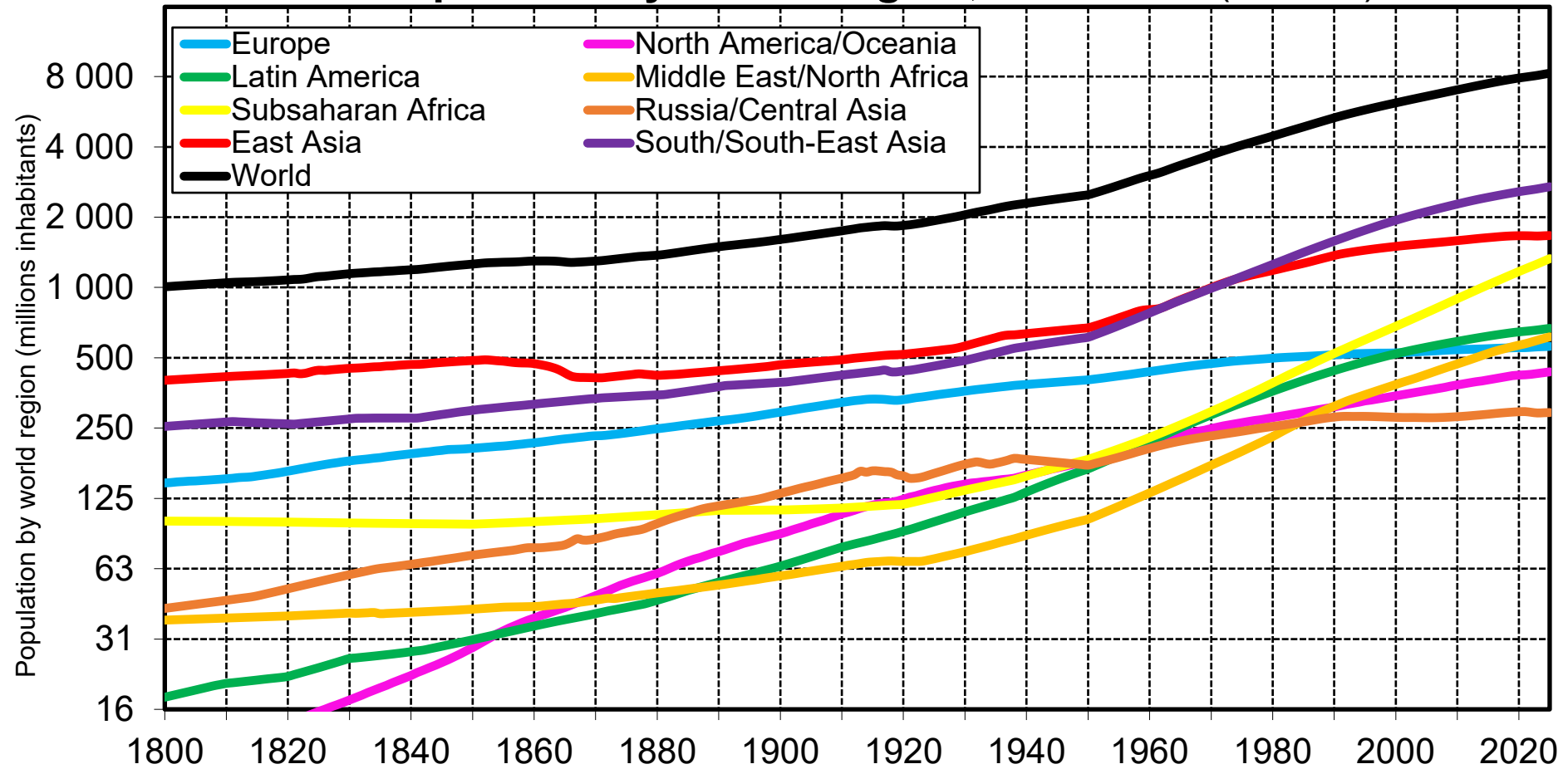


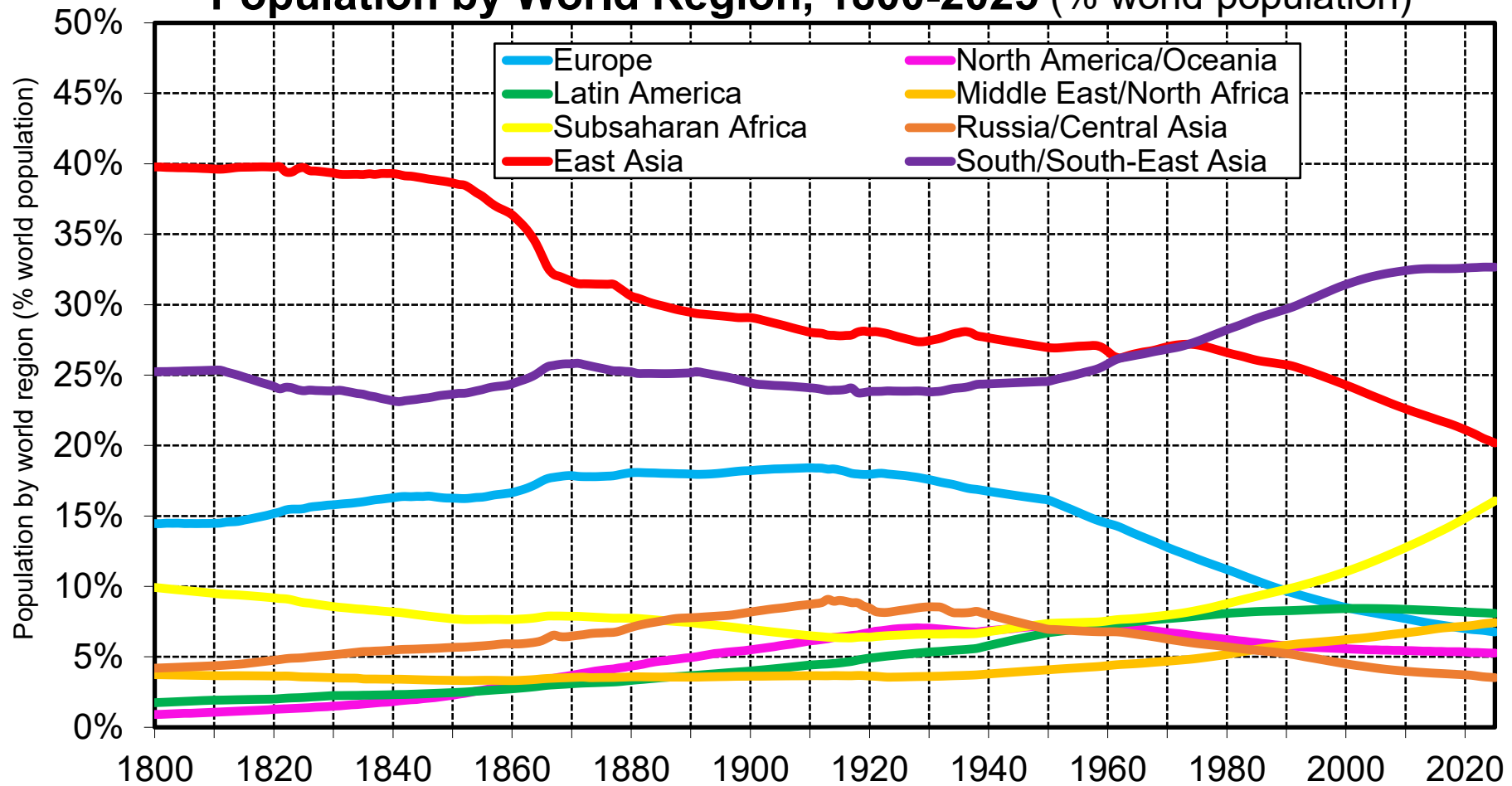
Population by World Region, 1800-2025 (millions)



Interpretation. World population increased from about 1 billion inhabitants in 1800 to 8 billion inhabitants in 2025 (including over 2 billion in South/South-East Asia, between 1 and 2 billions in Subsaharan Africa and East Asia, over 500 millions in Europe, Middle East/North Africa and Latin American, and between 250 and 500 millions in Russia/Central Asia and North America/Oceania).

Sources and series: see wid.world

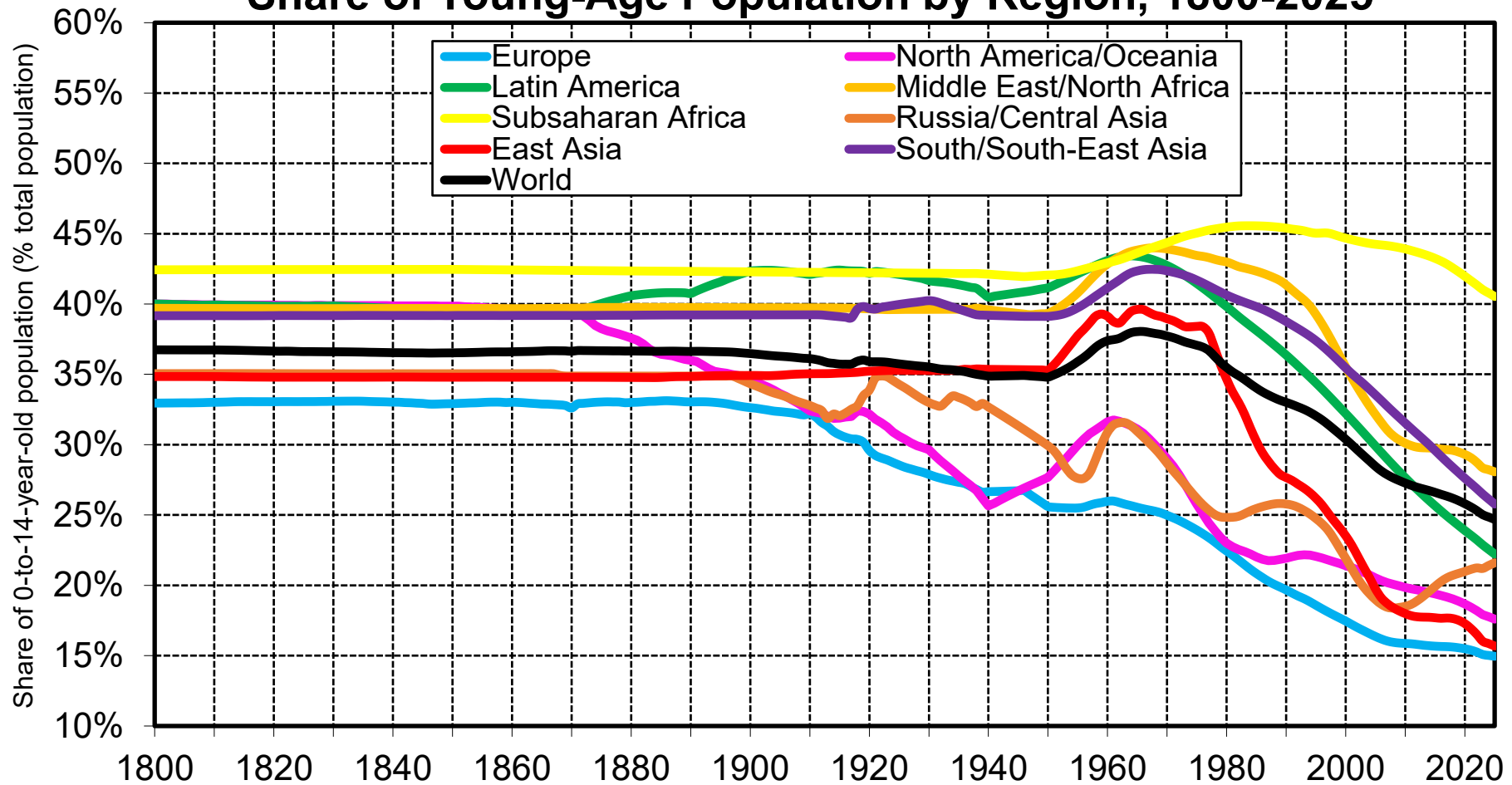
Population by World Region, 1800-2025 (% world population)



Interpretation. World population increased from about 1 billion inhabitants in 1800 to 8 billion inhabitants in 2025 (including over 2 billion in South/South-East Asia, between 1 and 2 billions in Subsaharan Africa and East Asia, over 500 millions in Europe, Middle East/North Africa and Latin American, and between 250 and 500 millions in Russia/Central Asia and North America/Oceania).

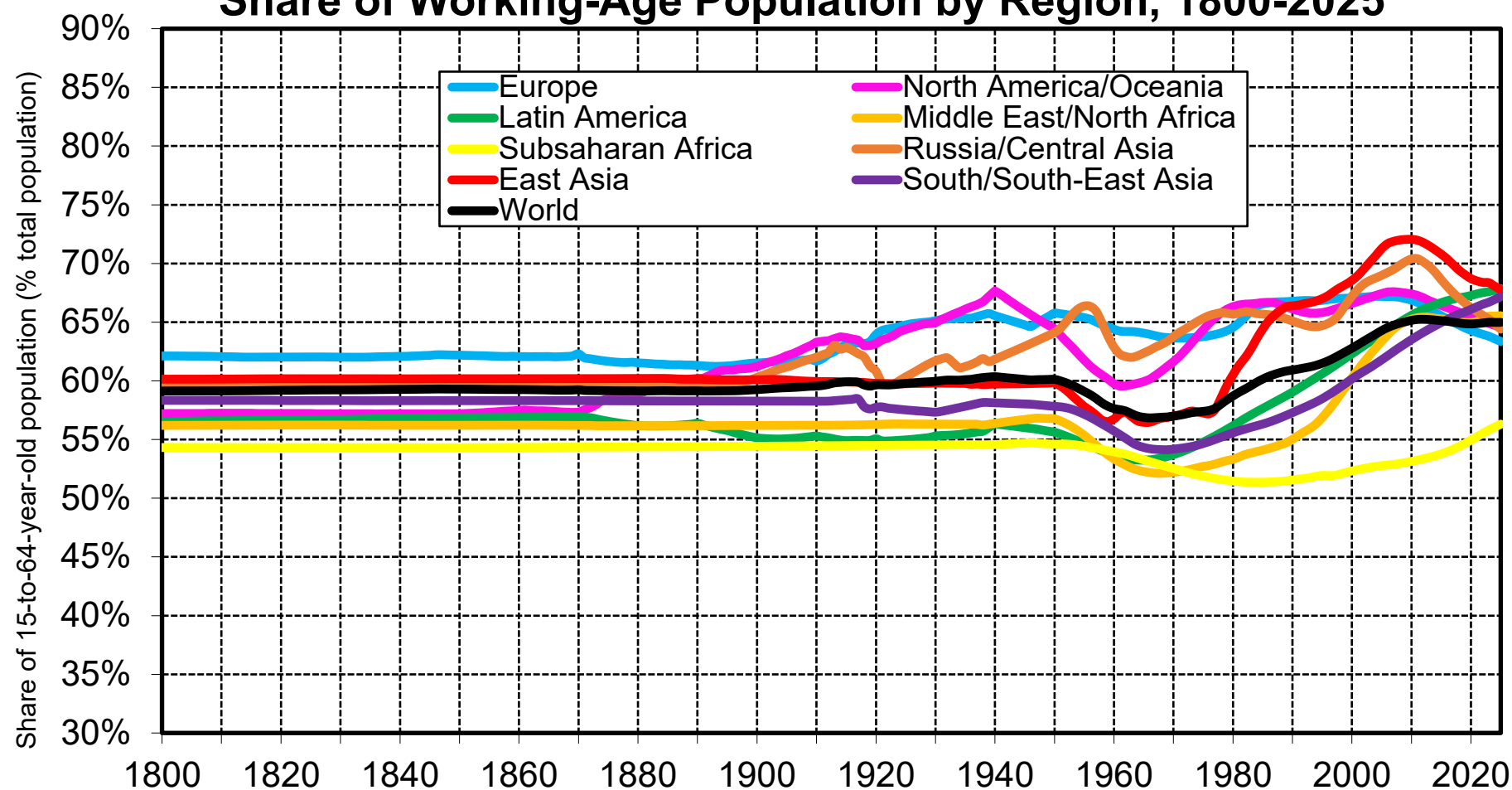
Sources and series: see wid.world

Share of Young-Age Population by Region, 1800-2025



Interpretation. The share of young-age population (0-to-14 year-old) in total population has declined relatively steadily at the world level between 1800 and 2025 (from 37% to 25%), with the exception of the post-World War 2 boom in fertility, and with interesting time and regional variations. **Sources and series:** see wid.world

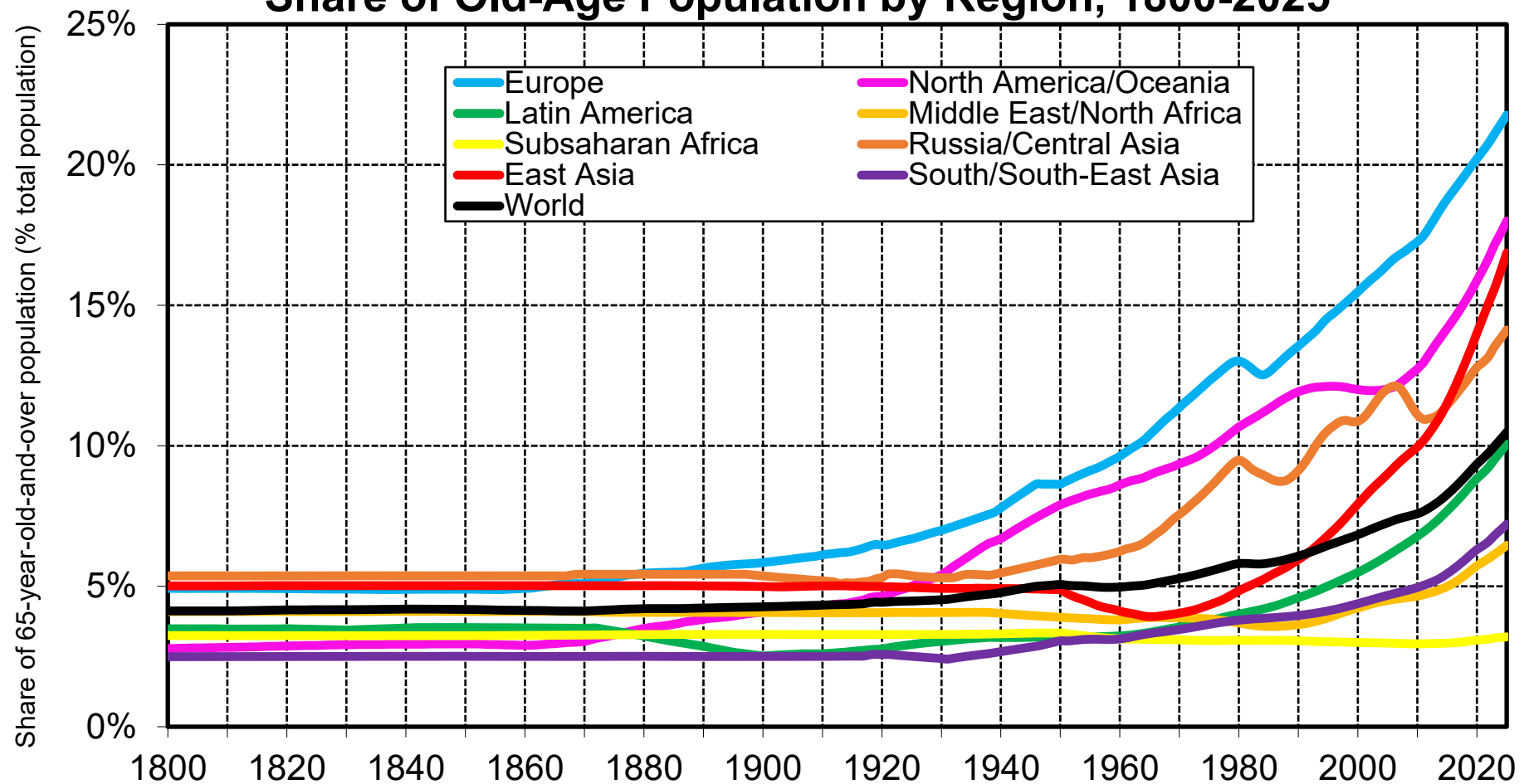
Share of Working-Age Population by Region, 1800-2025



Interpretation. The share of working-age population (15-to-64 year-old) has been relatively stable around 60-65% of total population at the world level between 1800 and 2025, with interesting time and regional variations, reflecting contradictory evolutions in the share of young-age population (0-to-14 year-old) and old-age population (65-year-old and over).

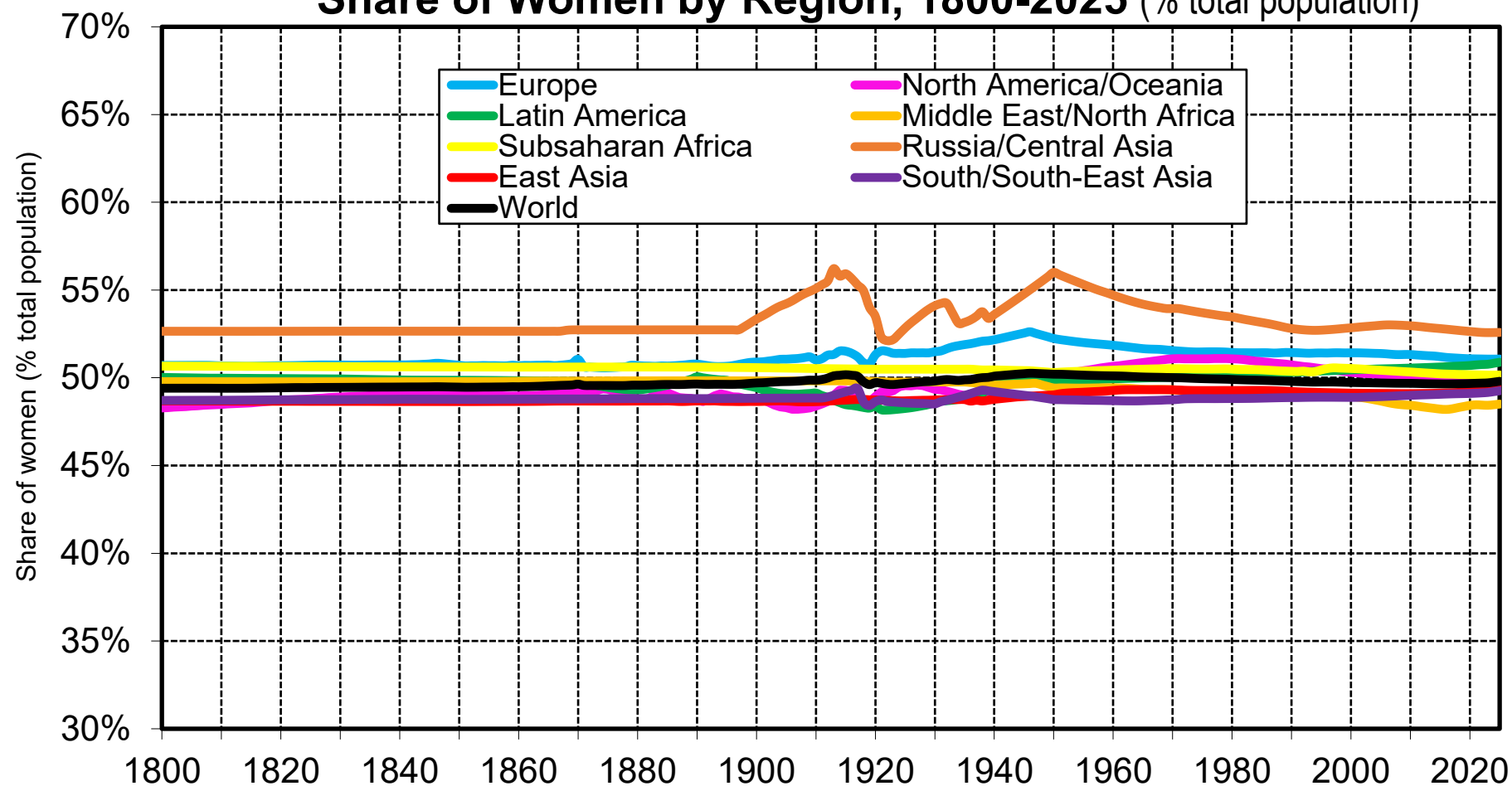
Sources and series: see wid.world

Share of Old-Age Population by Region, 1800-2025



Interpretation. The share of old-age population (65 year-old and over) in total population has increased relatively steadily at the world level between 1800 and 2025 (from 4% to 11%), with interesting time and regional variations. **Sources and series:** see wid.world

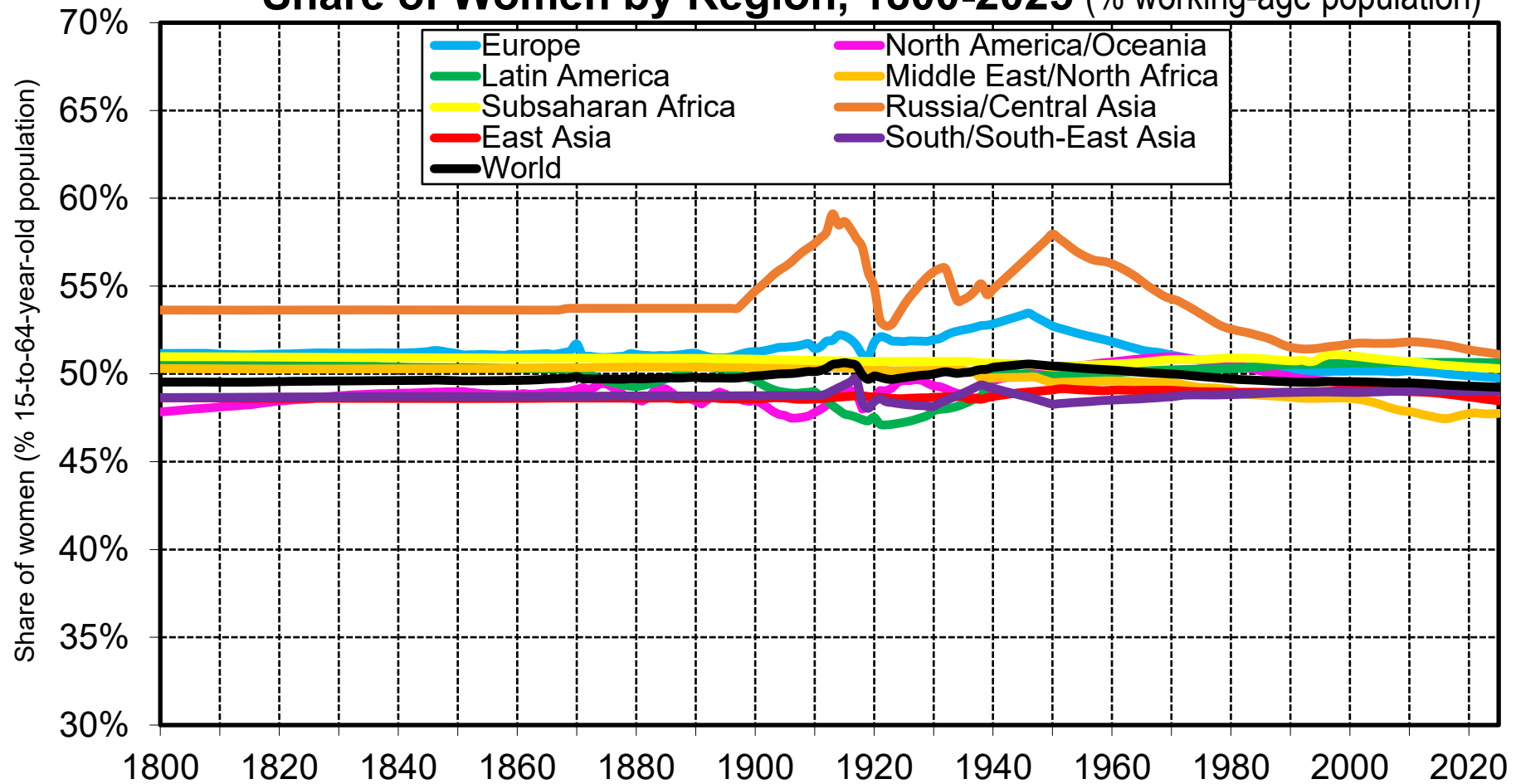
Share of Women by Region, 1800-2025 (% total population)



Interpretation. The share of women has been relatively stable around 50% of total population at the world level between 1800 and 2025, with interesting time and regional variations, reflecting aging effects as well as post-war demographic imbalances.

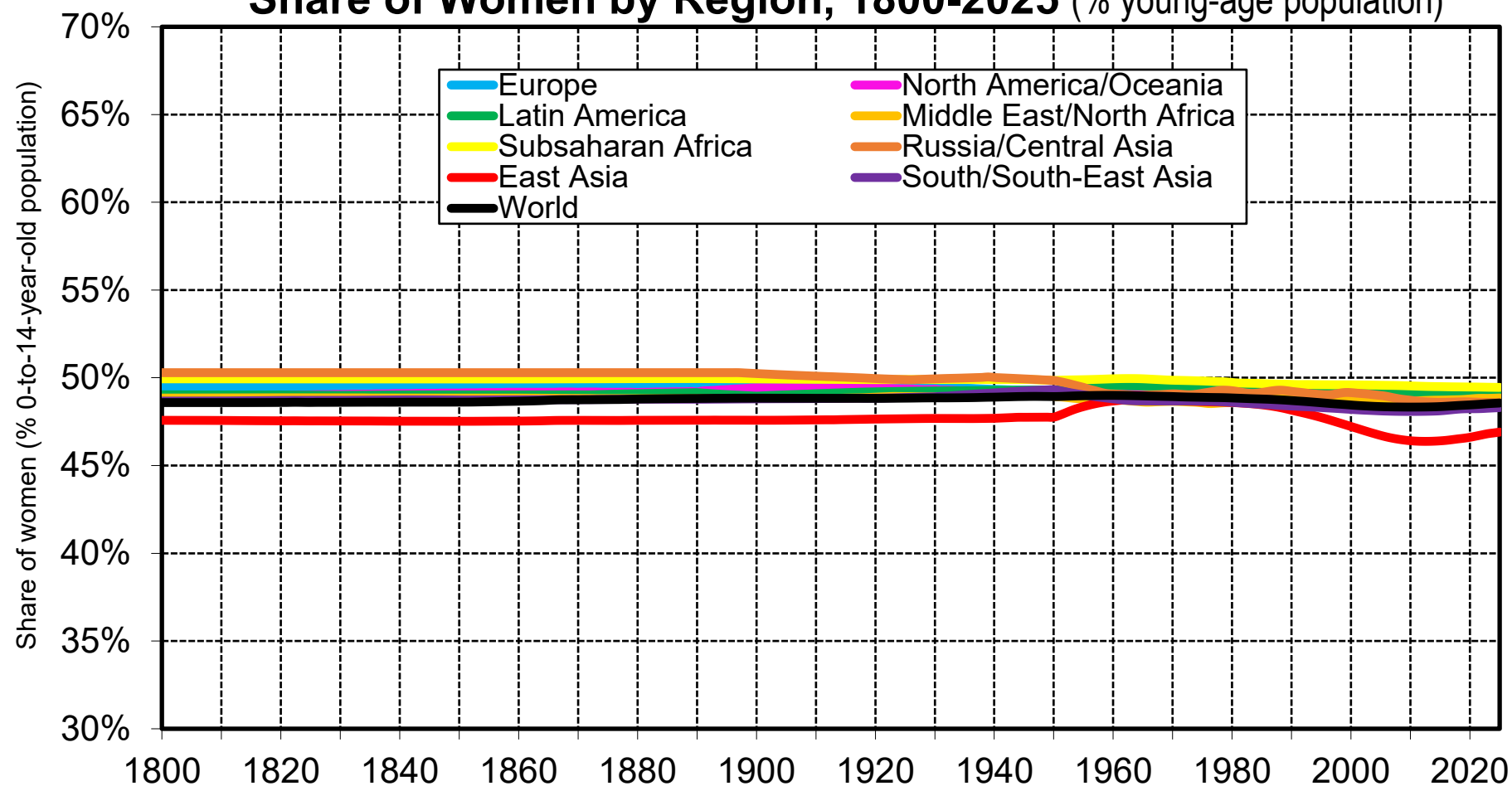
Sources and series: see wid.world

Share of Women by Region, 1800-2025 (% working-age population)



Interpretation. The share of women has been relatively stable around 50% of working-age population at the world level between 1800 and 2025, with interesting time and regional variations, reflecting cross-regional differences in gender survival gaps, differential aging effects as well as post-war demographic imbalances (especially for Russia/USSR). **Sources and series:** see wid.world

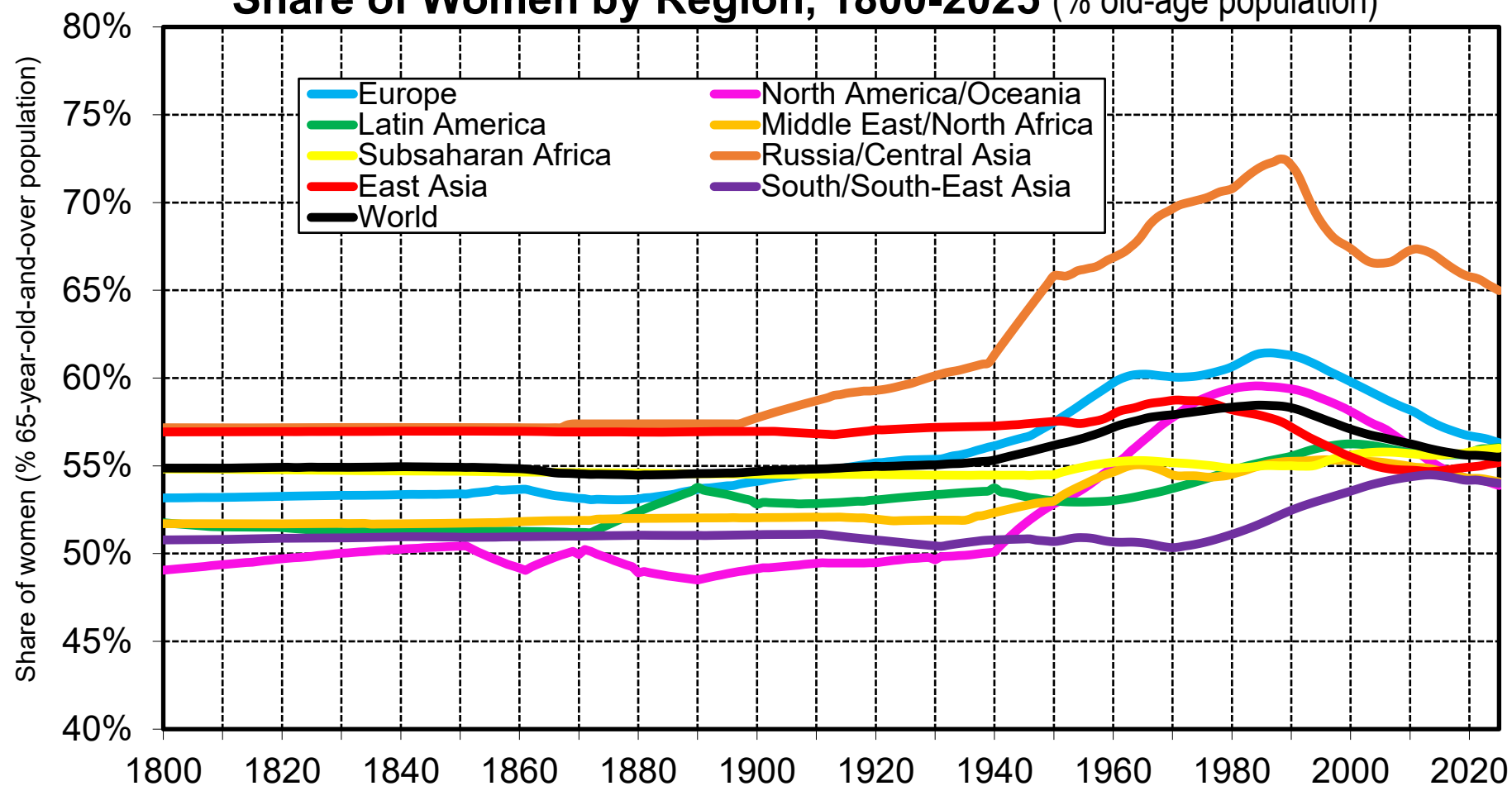
Share of Women by Region, 1800-2025 (% young-age population)



Interpretation. The share of women has been relatively stable around 50% of young-age population at the world level between 1800 and 2025, with interesting time and regional variations, for instance in the context of one-child policy in China.

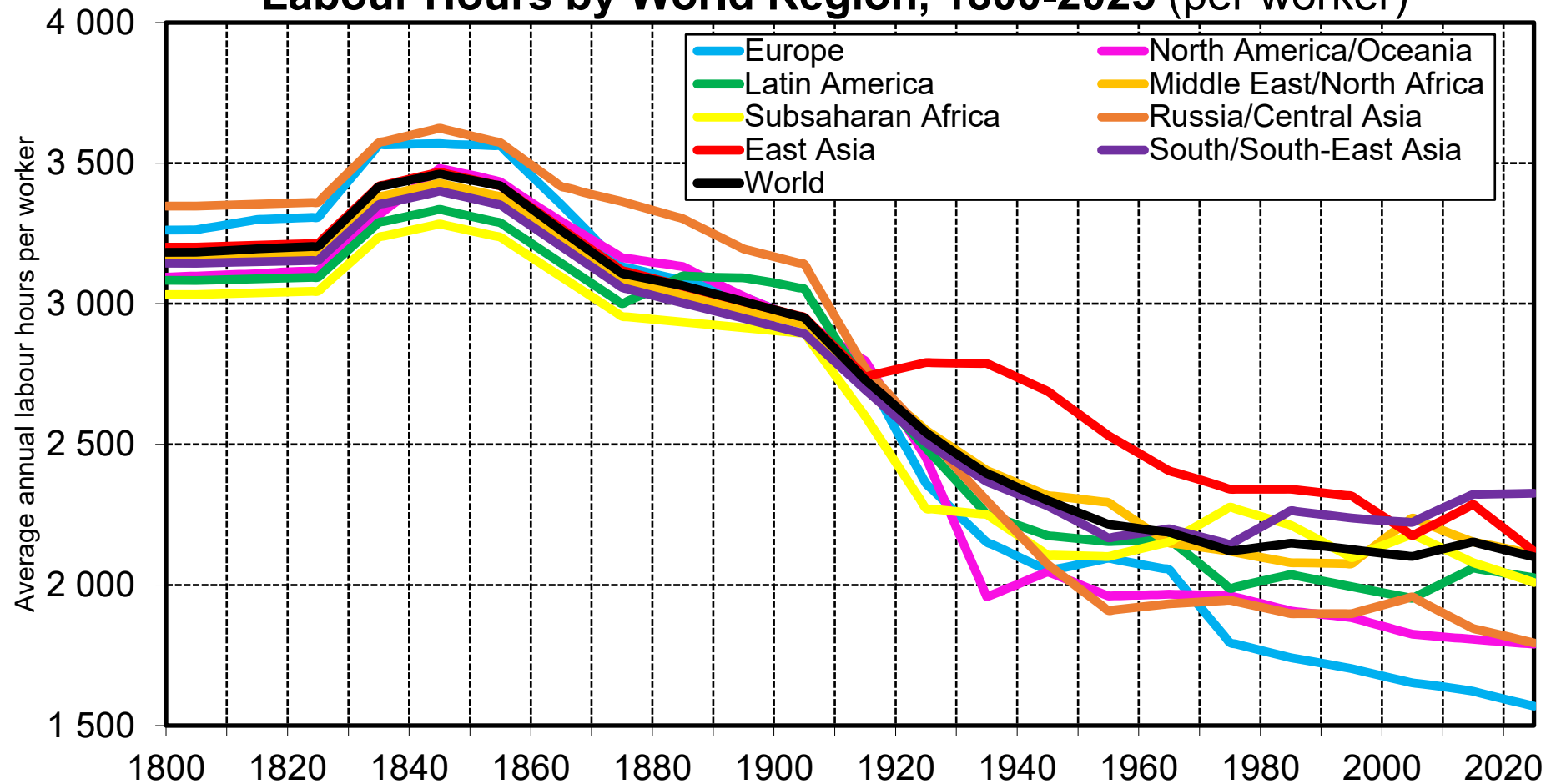
Sources and series: see wid.world

Share of Women by Region, 1800-2025 (% old-age population)



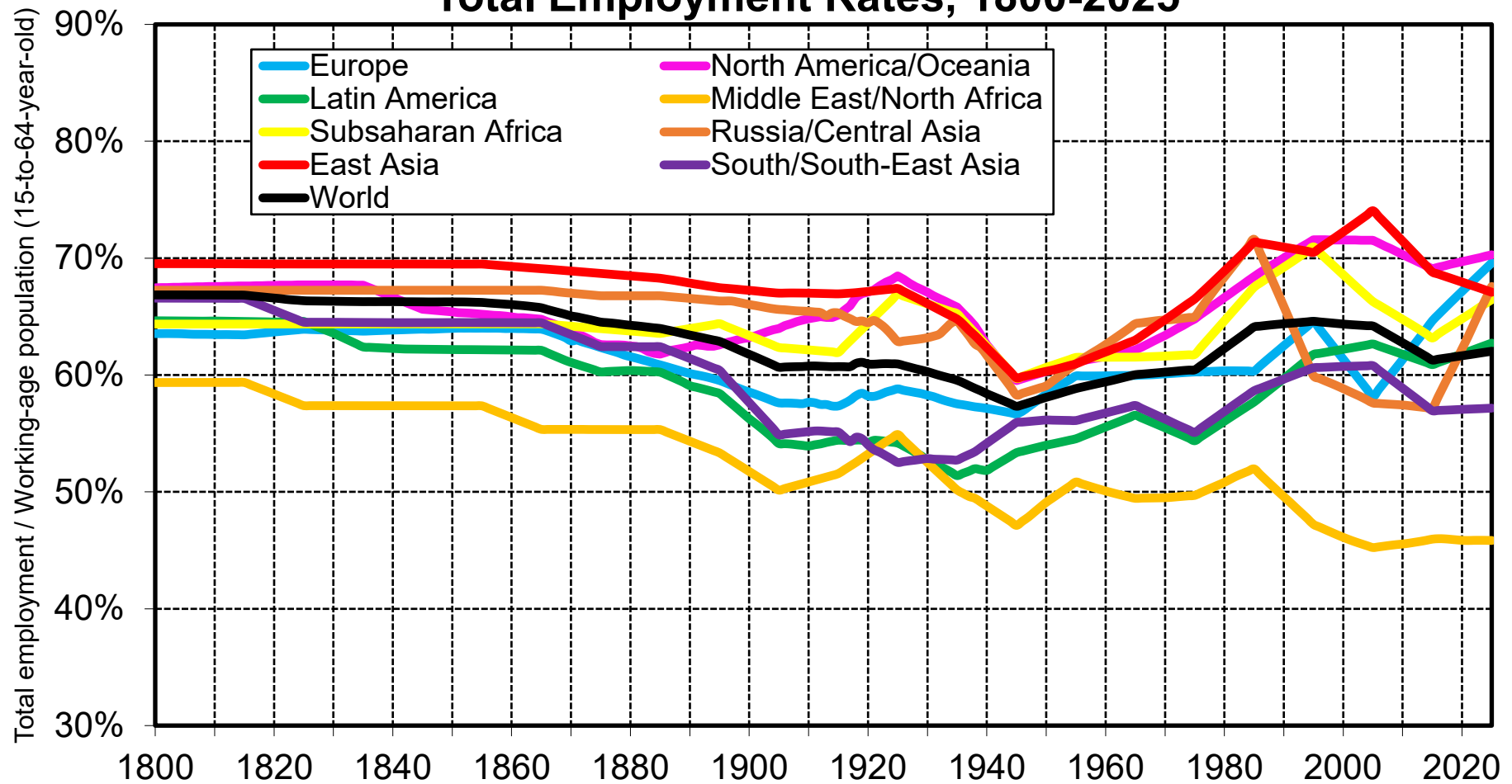
Interpretation. The share of women has generally been higher than 50% of old-age population at the world level between 1800 and 2025, with interesting time and regional variations, reflecting cross-regional differences in gender survival gaps, differential aging effects as well as post-war demographic imbalances (especially for Russia/USSR). **Sources and series:** see wid.world

Labour Hours by World Region, 1800-2025 (per worker)



Interpretation. We observe a large long-run decline in average economic labour hours per worker (all employed persons aged 15-to-64 combined, irrespective of gender, employment status or sector). Annual labour hours around 3000-3500 hours correspond to about 60-65 hours per week all year long. Annual hours around 2000 hours correspond to 40 hours per week during 50 weeks (2 weeks in paid vacation) and annual hours around 1600 hours correspond to 35 hours per week during 47 weeks (5 weeks in paid vacation). **Sources and series:** see wid.world

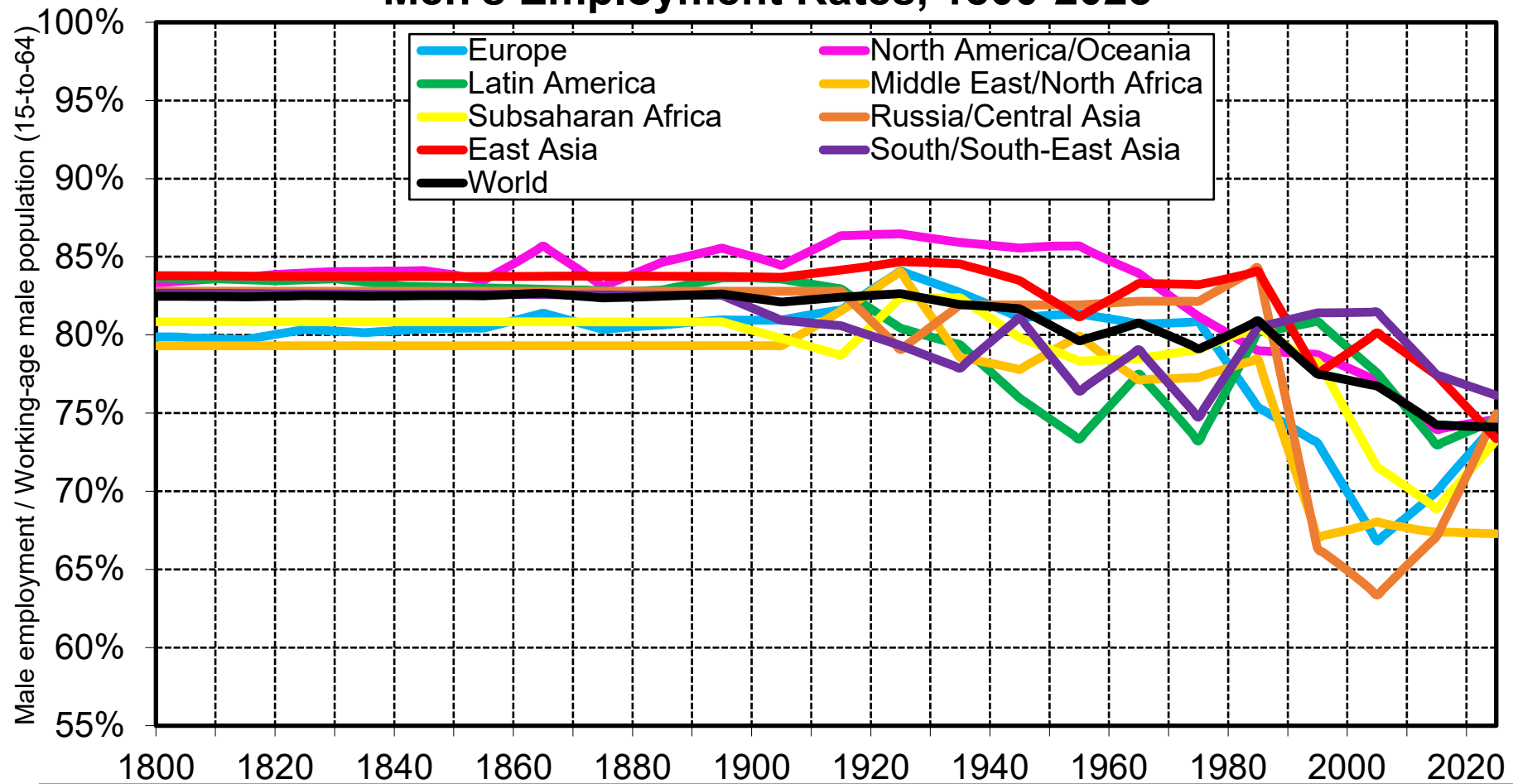
Total Employment Rates, 1800-2025



Interpretation. The employment rate, defined as the ratio between total employment (irrespective of gender, employment status or sector) and working-age population (15-to-64-year-old), has been relatively stable around 60-65% at the global level over the 1800-2025 period, with interesting variations across regions and over time, reflecting in particular important variations in female employment.

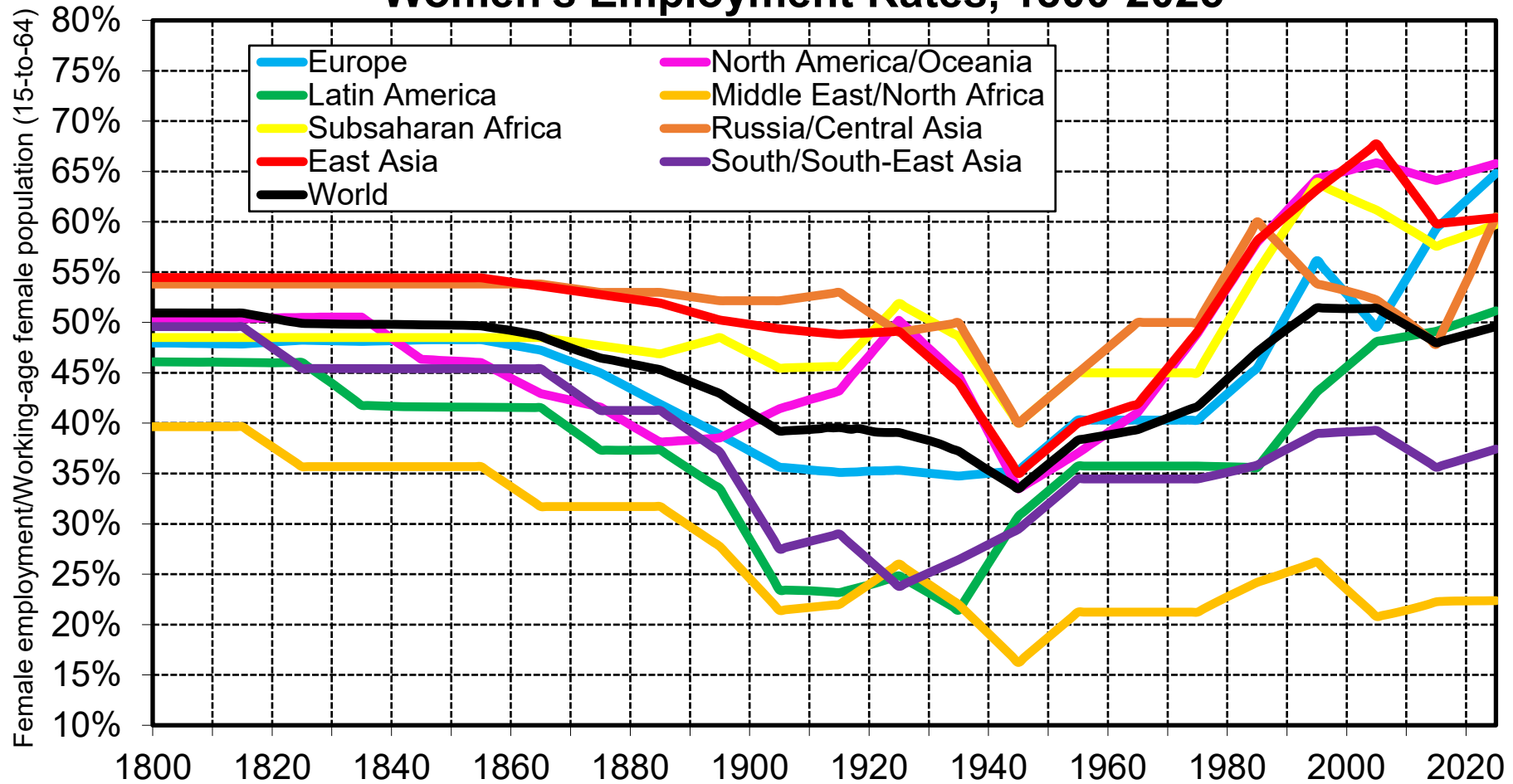
Sources and series: see wid.world

Men's Employment Rates, 1800-2025



Interpretation. Men's employment rate, defined as the ratio between total male employment (irrespective of status or sector) and working-age male population (15-to-64-year-old), has been relatively stable around 80-85% at the global level in the long-run, with a gradual decline in recent decades due to a variety of factors (late entry of younger generations into labor market due to educational advances, early retirement of older generations, low employment opportunities, etc.). **Sources and series:** see wid.world

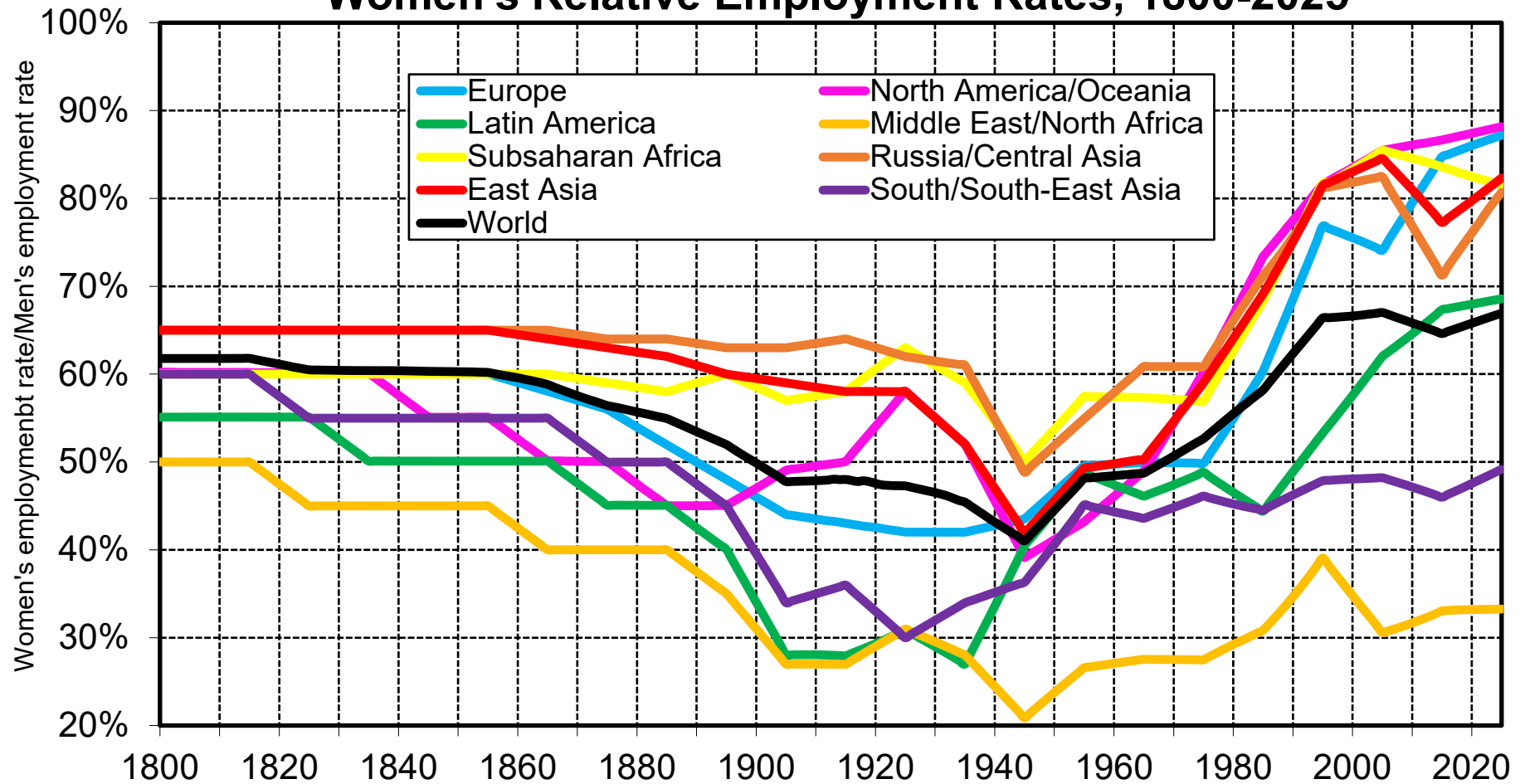
Women's Employment Rates, 1800-2025



Interpretation. Women's employment rate, defined as the ratio between total female employment (irrespective of employment status or sector) and working-age female population (15-to-64-year-old), has followed a U-shaped curve at the global level over the 1800-2025 period, with important time and regional variations.

Sources and series: see wid.world

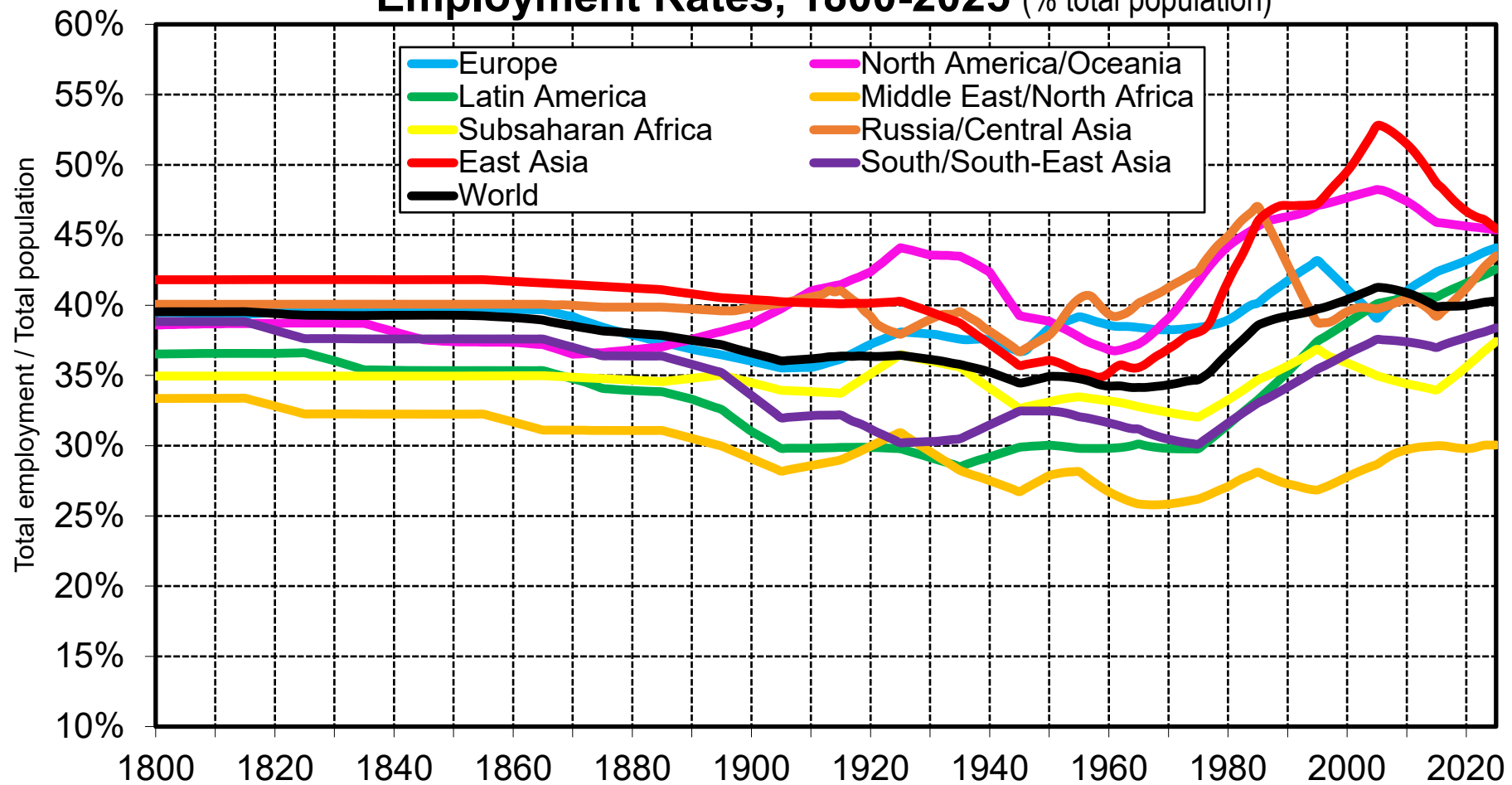
Women's Relative Employment Rates, 1800-2025



Interpretation. Women's relative employment rate, defined as the ratio between total women's and men's employment rates among the working-age female population (15-to-64-year-old), has followed a U-shaped curve at the global level over the 1800-2025 period, with important time and regional variations.

Sources and series: see wid.world

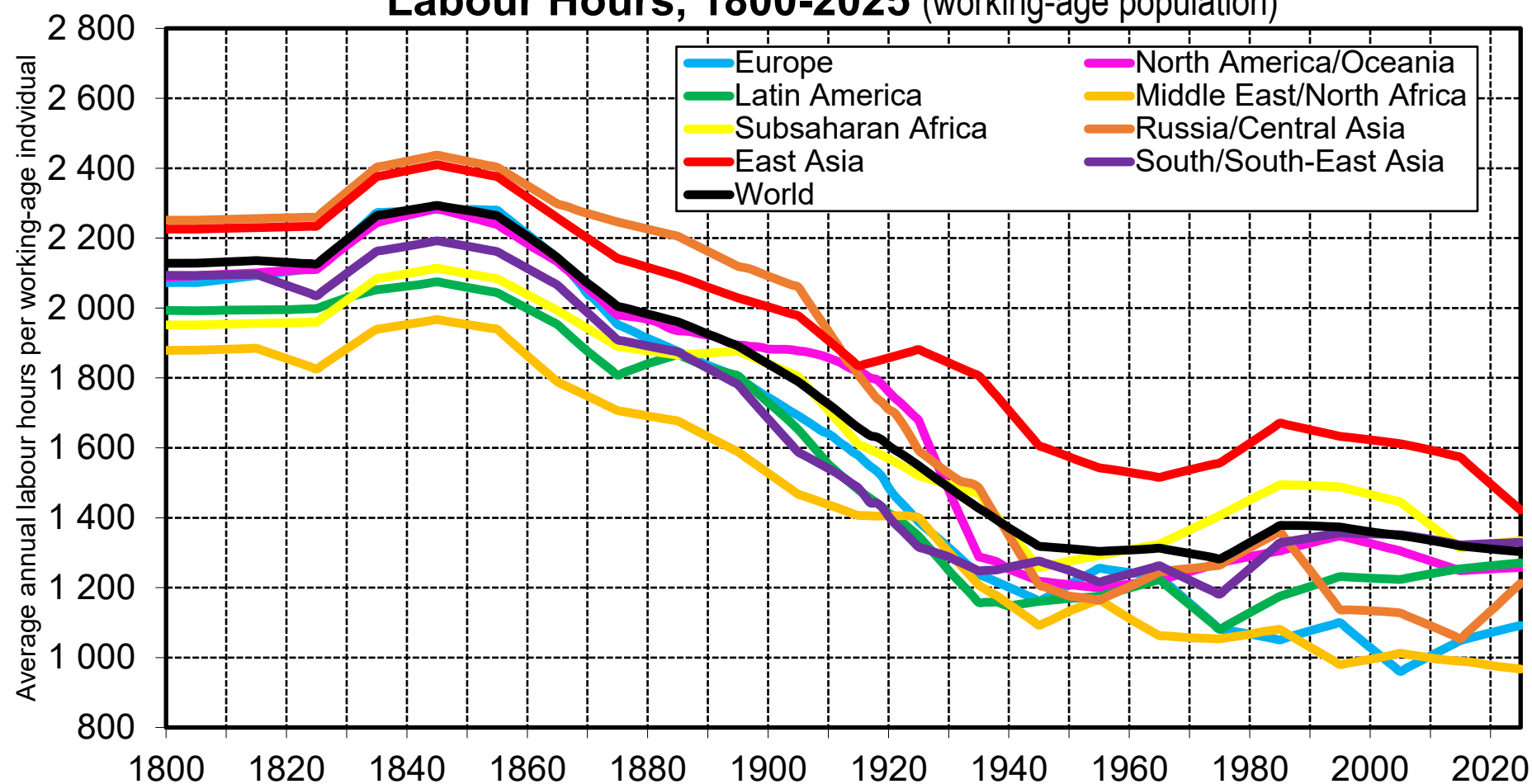
Employment Rates, 1800-2025 (% total population)



Interpretation. The employment rate, defined as the ratio between total employment (irrespective of gender, employment status or sector) and total population, has been relatively stable around 35-45% at the global level over the 1800-2025 period, with interesting variations across regions and over time, reflecting in particular important variations in female employment.

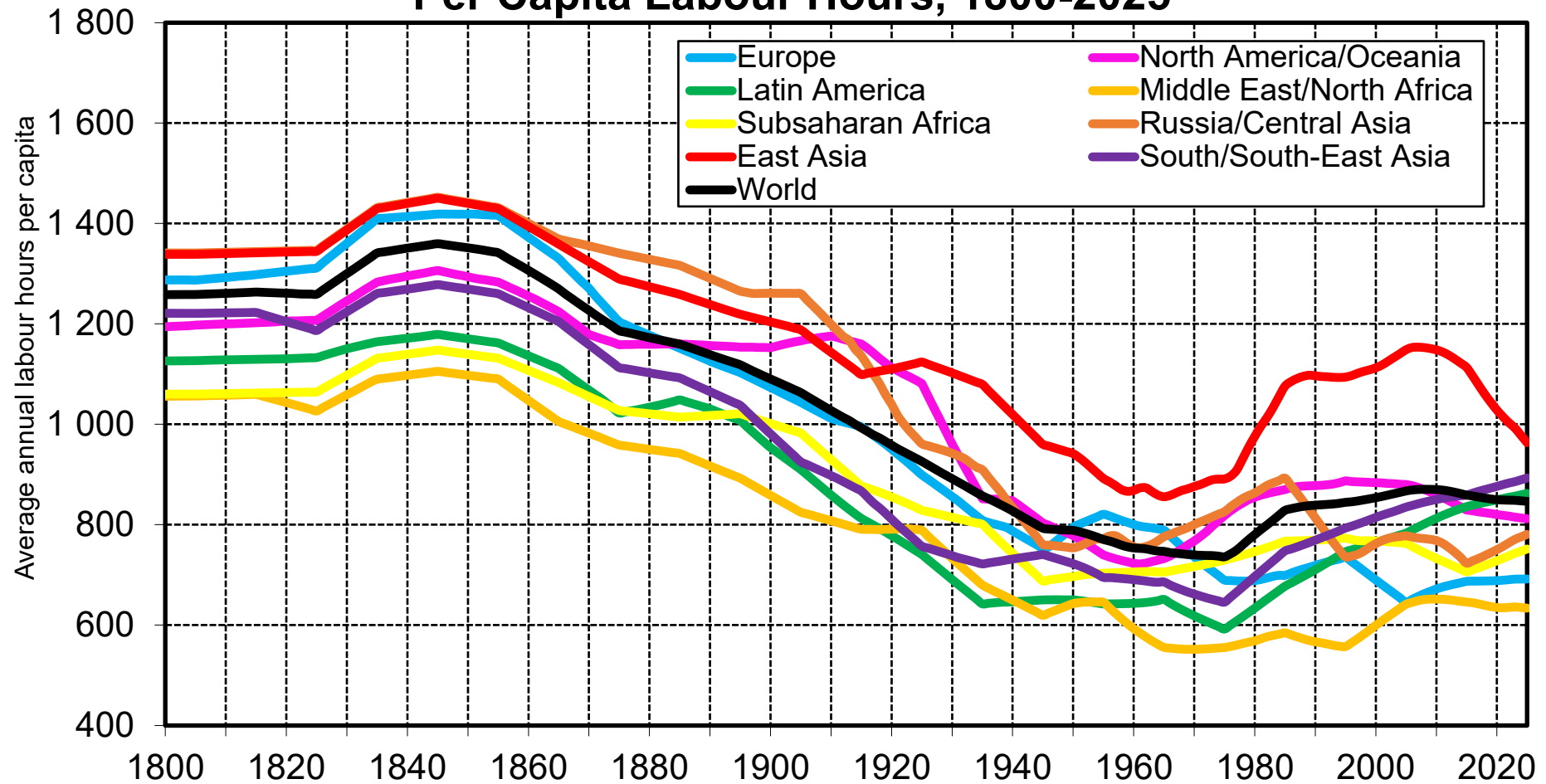
Sources and series: see wid.world

Labour Hours, 1800-2025 (working-age population)



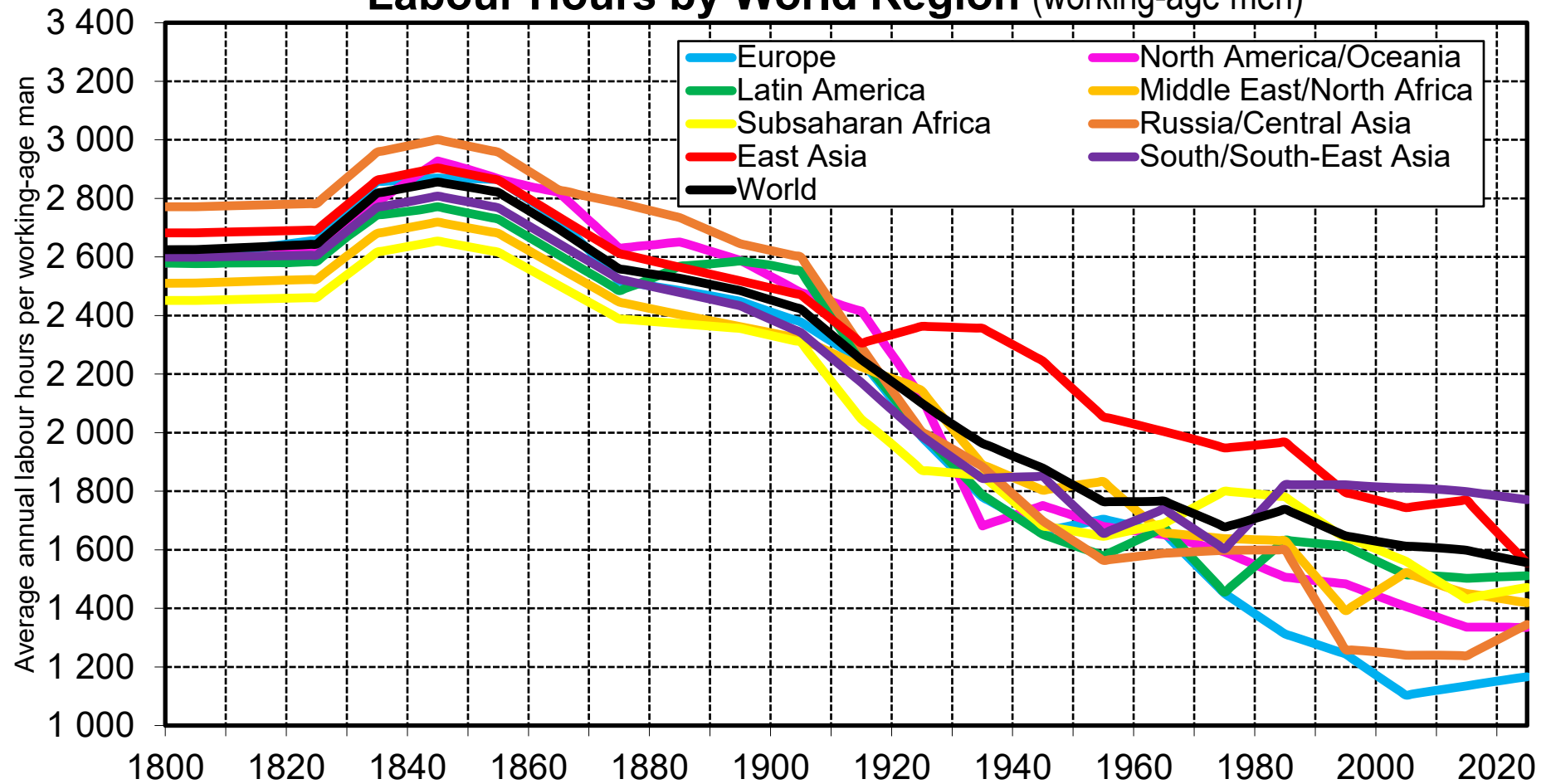
Interpretation. We observe a long-run decline in average economic labour hours per working-age individual (15-to-64-year-old) at the global level over the 1800-2025 period, with a stabilisation in recent decades due to rising female employment. **Sources and series:** see wid.world

Per Capita Labour Hours, 1800-2025



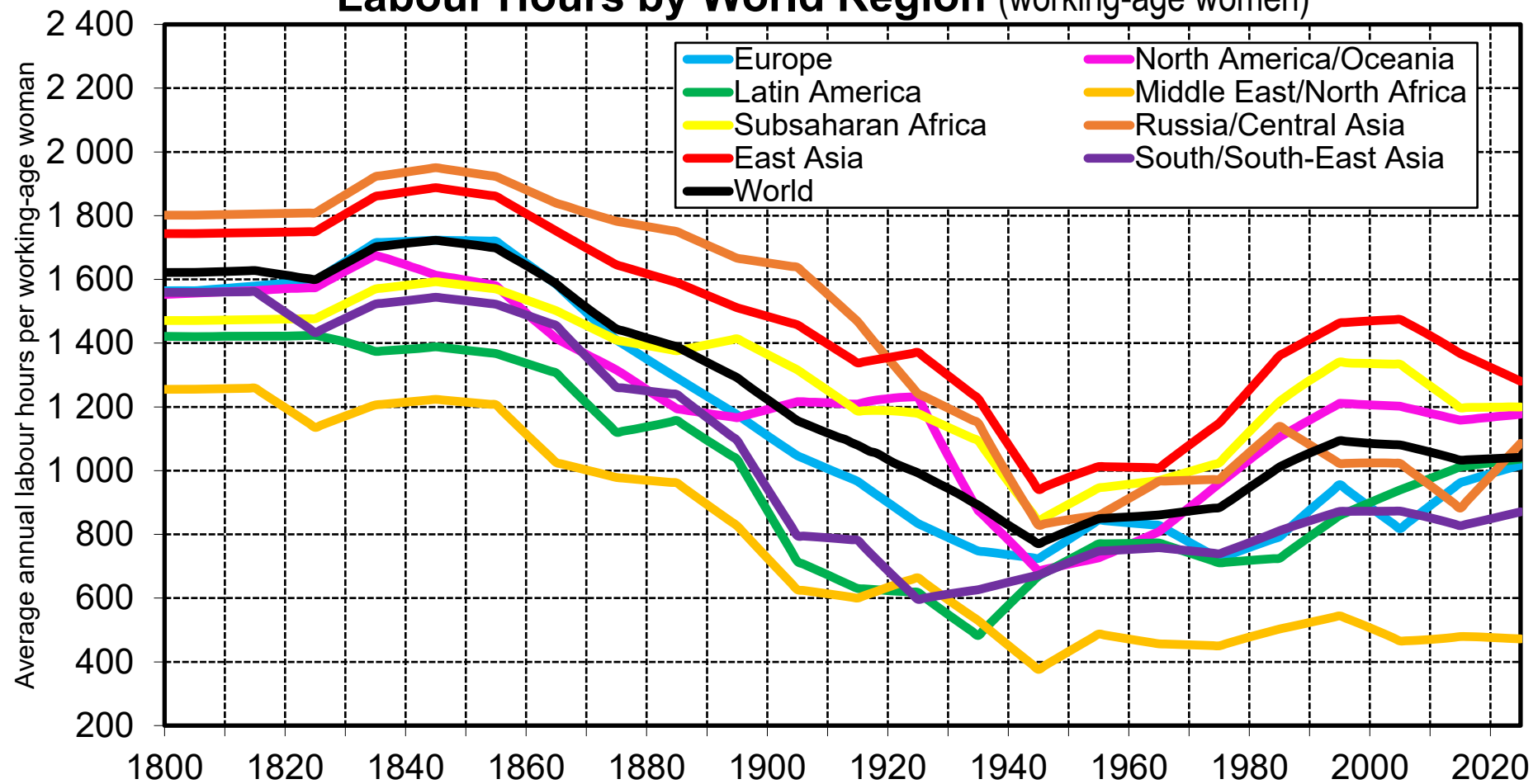
Interpretation. We observe a large decline in average economic labour hours per capita at the global level over the 1800-2025 period, with a number of exceptions due to demographic factors and changing female employmen rates. **Sources and series:** see wid.world

Labour Hours by World Region (working-age men)



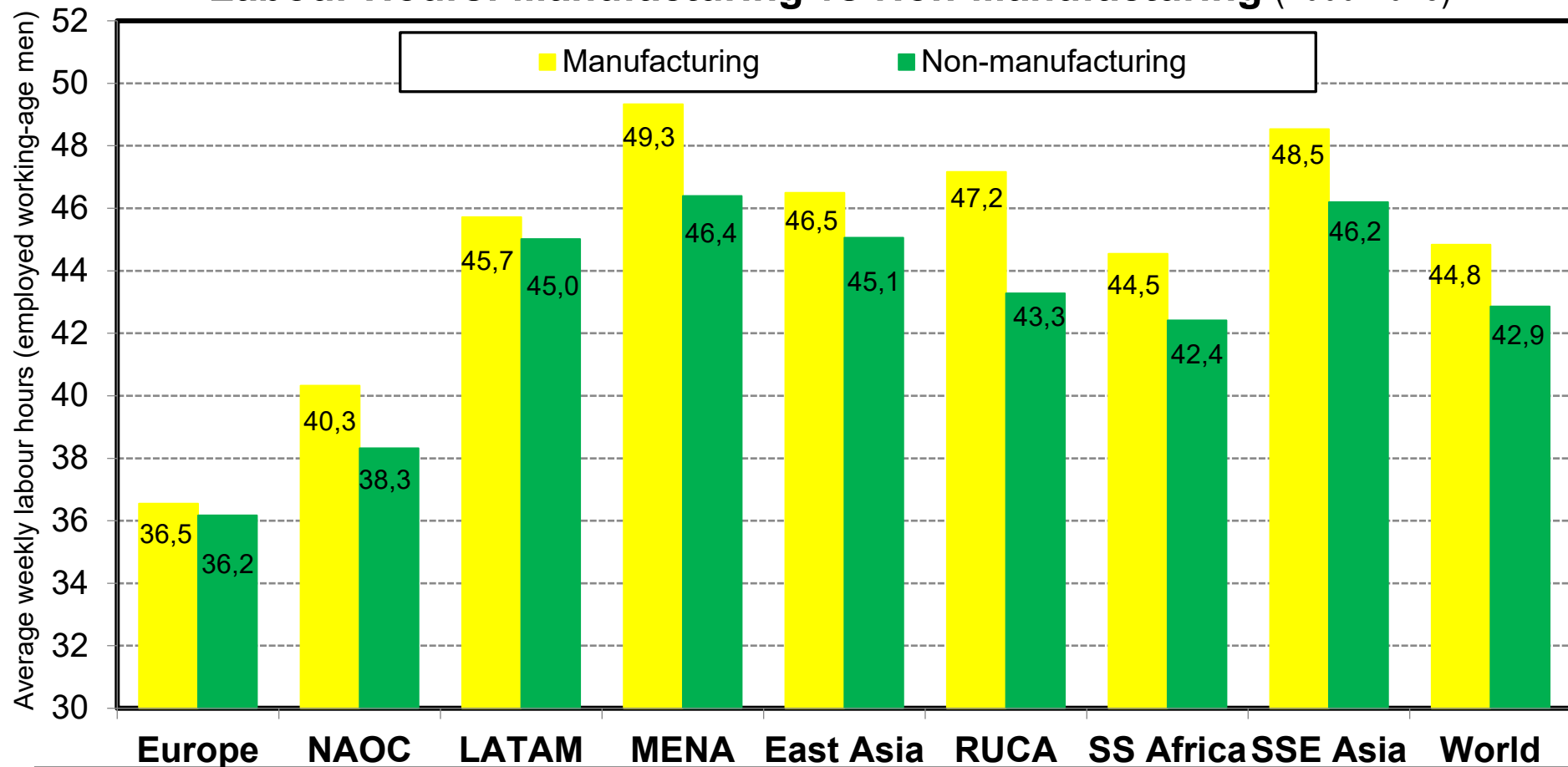
Interpretation. We observe a long-run decline in average economic labour hours per working-age man at the global level over the 1800-2025 period. **Sources and series:** see wid.world

Labour Hours by World Region (working-age women)



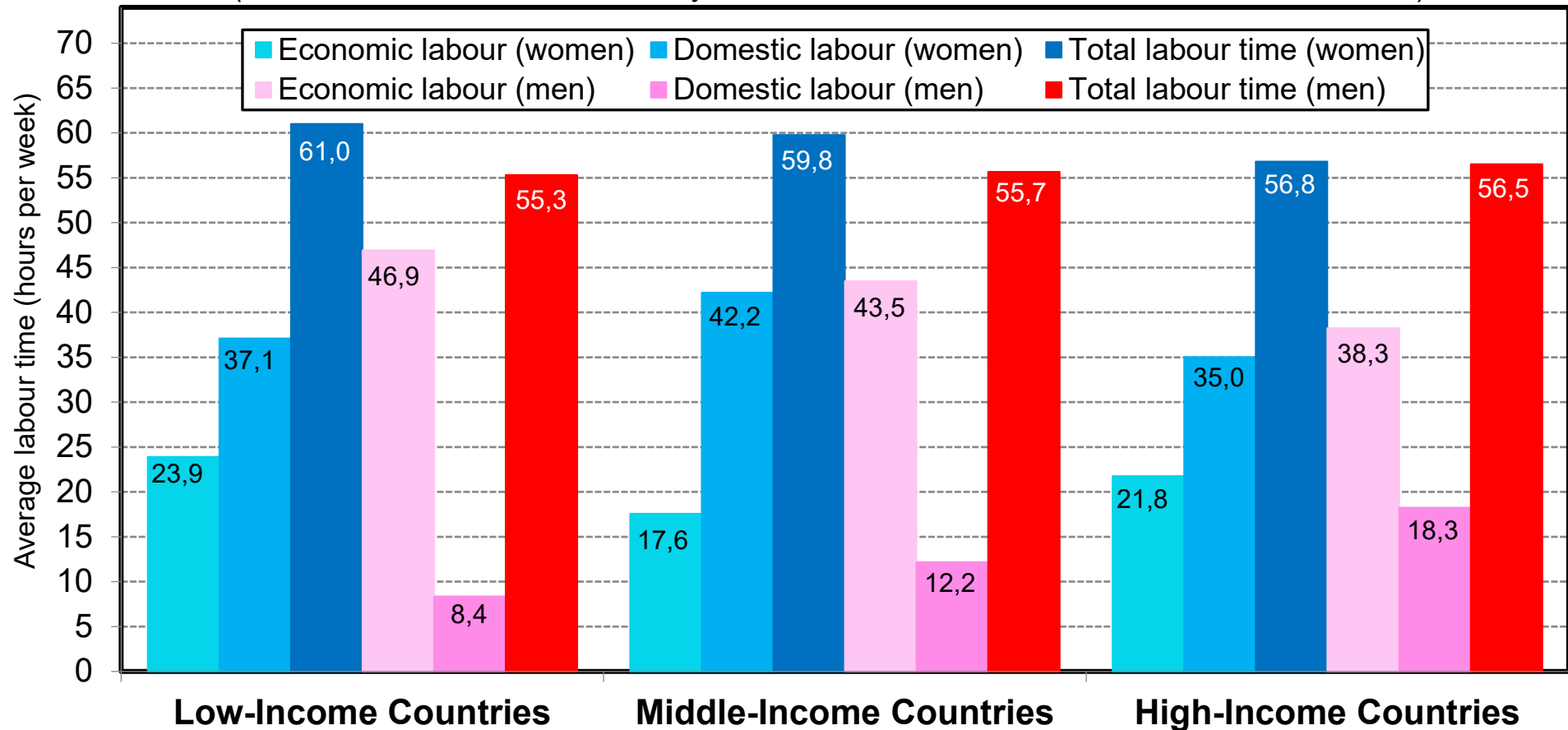
Interpretation. We observe a long-run U-shaped pattern of average economic labour hours per working-age woman at the global level over the 1800-2025 period, with interesting regional variations. **Sources and series:** see wid.world

Labour Hours: Manufacturing vs Non-Manufacturing (2000-2025)



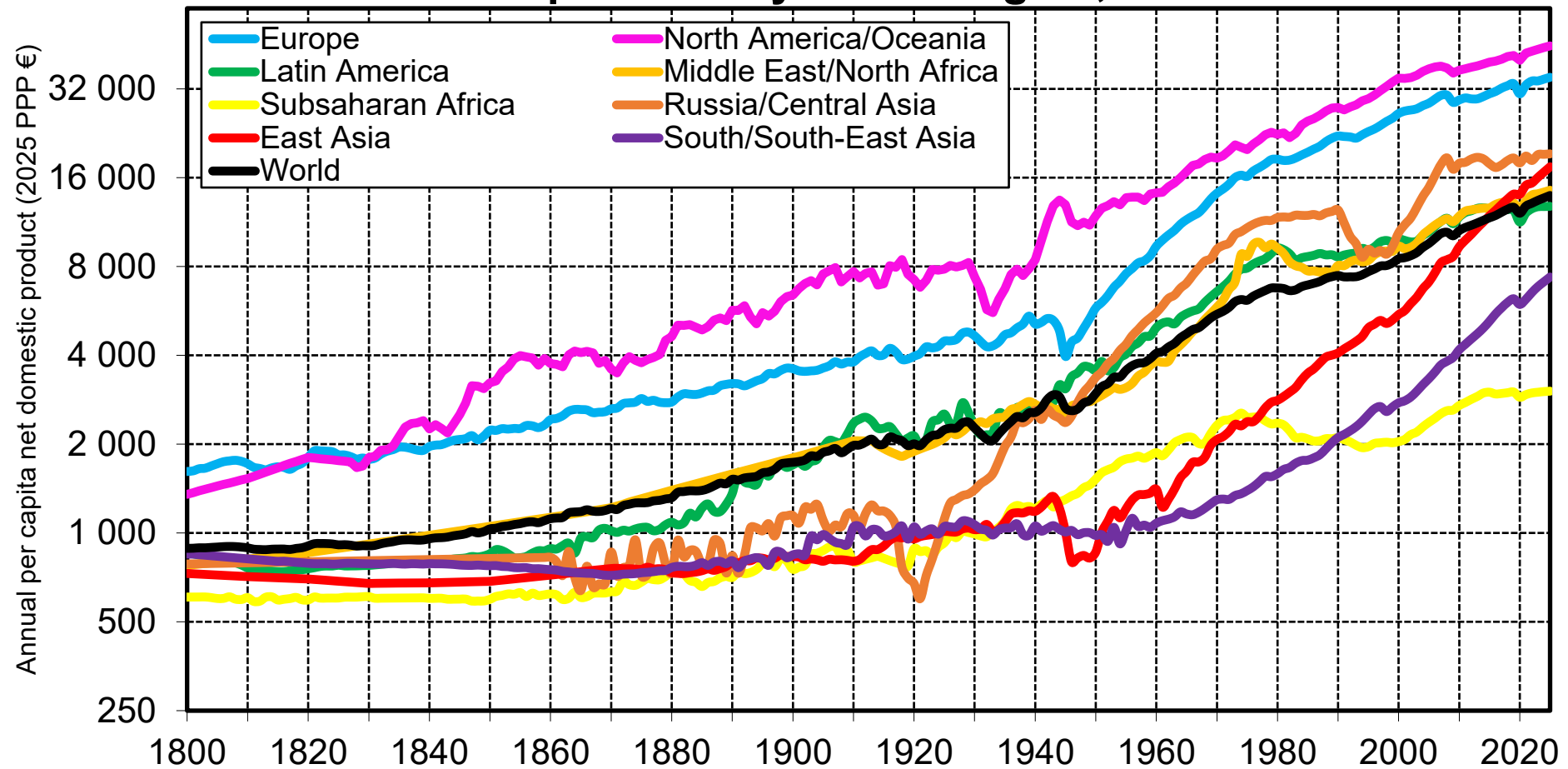
Interpretation. Average weekly economic labour hours are longer in the manufacturing sector than in the non-manufacturing sector, but the between-sector gap is relatively small as compared to the overall between-region gap. E.g. in Europe average weekly work hours for employed working age-men (15-to-64-year-old) in 2000-2025 are 36,5 hours in manufacturing and 36,2 hours in non-manufacturing, vs 48,5 hours in manufacturing and 46,2 hours in non-manufacturing in South & South-East Asia. **Note.** Authors' computations using micro surveys run in 35 countries over 2000-2025 period. Averages are computed over all employed men aged 15-to-64. **Sources & series:** wid.world

Women Work More Than Men (married only, Gottlieb et al 2024) (Evidence from Time-Use Surveys conducted in Poor & Rich Countries, 1970-2025)



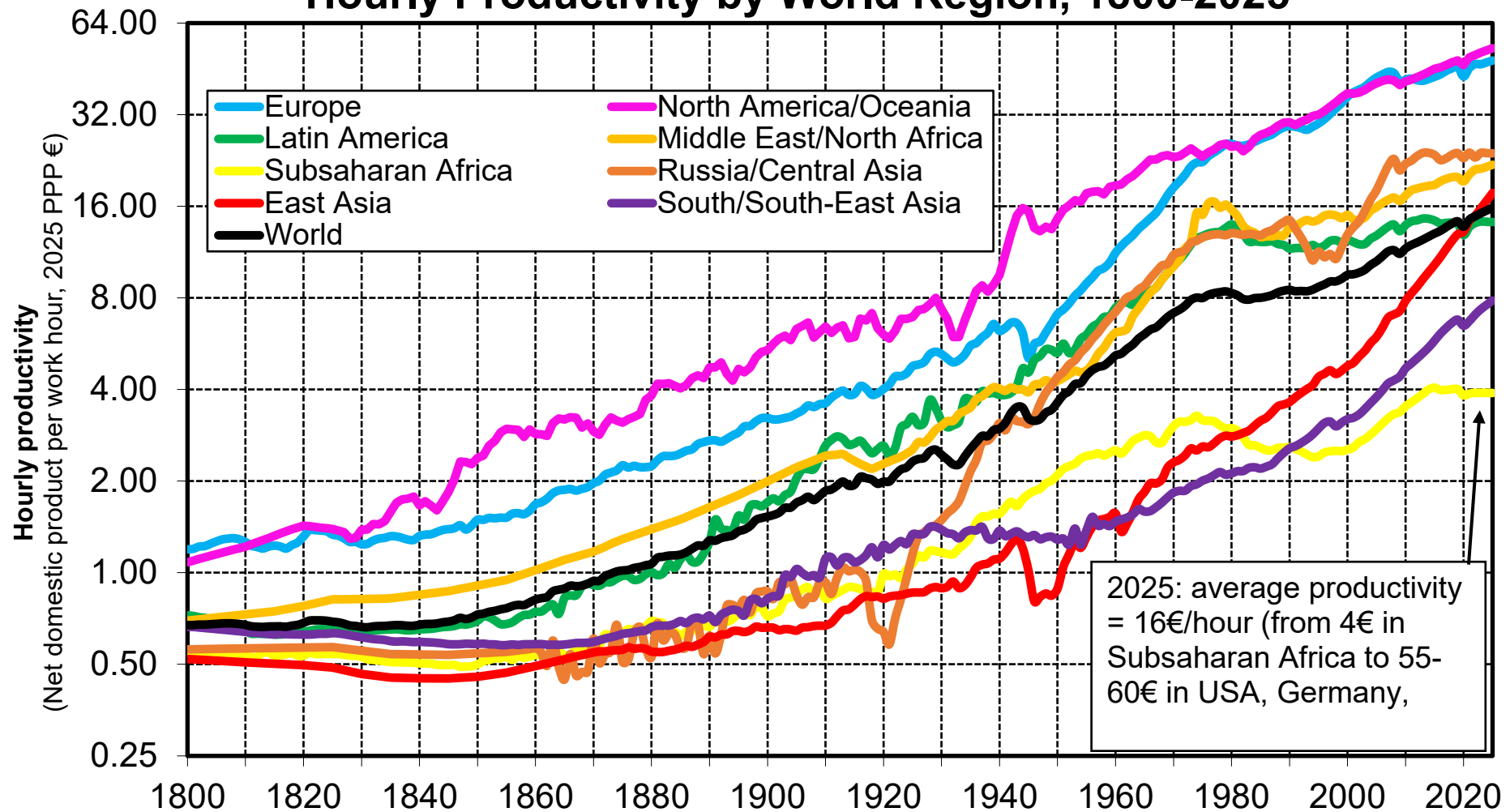
Interpretation. If we look at total labour time (economic+domestic), women work more men in all categories of countries, particularly in low-income countries (per capita GDP<10k€) & middle-income countries (btw 10k and 30k). **Note.** Estimates come from time-use surveys run in 50 countries over 1970-2025 period (mostly 2000-2025). Averages are over all married individuals aged 15-64 (employed or not). Data from Gottlieb et al 2024, table 2.

Per Capita NDP by World Region, 1800-2025



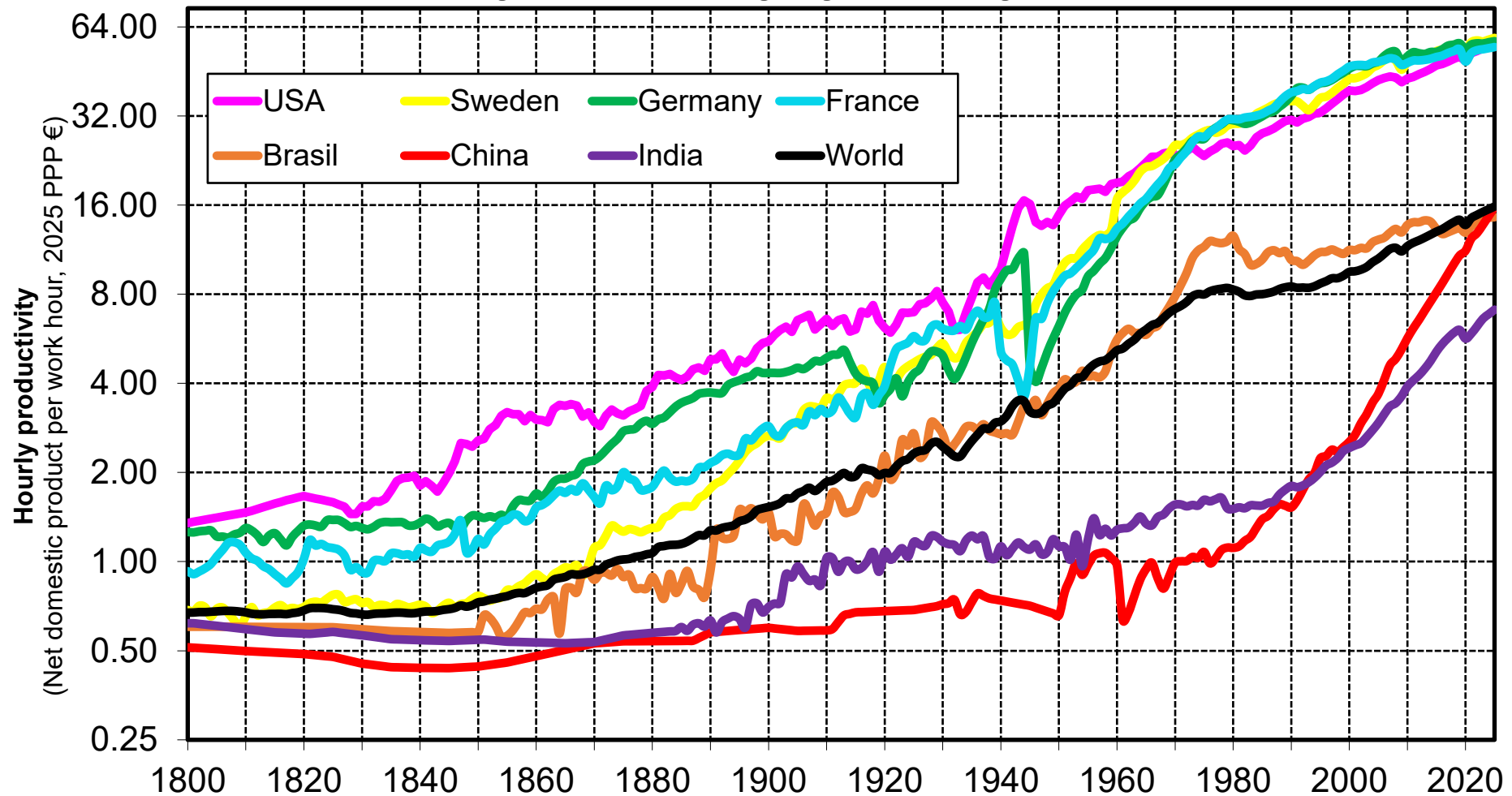
Interpretation. Expressed in 2025 PPP €, annual per capita net domestic product (NDP) rose from about 900€ in 1800 to 14 000€ in 2025 at the global level. I.e. it was multiplied by about 16, which corresponds to average annual real growth rate of 1,2% per year, with large variations over time and across regions. **Sources and series:** see wid.world

Hourly Productivity by World Region, 1800-2025



Interpretation. Expressed in 2025 PPP €, hourly productivity (as defined by net domestic product by economic labour hour) rose from about 0.7€ in 1800 to 16€ in 2025 at the global level. I.e. it was multiplied by about 24, which corresponds to average annual real growth rate of 1,4% per year, with large variations over time and across regions. **Sources and series:** see wid.world

Hourly Productivity by Country, 1800-2025



Interpretation. Expressed in 2025 PPP €, hourly productivity (as defined by net domestic product by economic labour hour) rose from about 0.7€ in 1800 to 16€ in 2025 at the global level. I.e. it was multiplied by about 24, which corresponds to average annual real growth rate of 1,4% per year, with large variations over time and across regions. **Sources and series:** see wid.world

Table C1. Per Capita NDP Growth by World Regions (1800-2025)					
Annual real growth rate of per capita net domestic product (NDP)	1800-2025	1800-1910	1910-1950	1950-1990	1990-2025
East Asia	1.4%	0.1%	0.2%	4.0%	4.2%
Europe	1.4%	0.8%	1.1%	3.4%	1.3%
Latin America	1.2%	0.9%	1.0%	2.2%	1.1%
Middle East/ North Africa	1.3%	0.9%	0.8%	2.6%	1.7%
North America/ Oceania	1.6%	1.6%	1.1%	2.1%	1.4%
Russia/ Central Asia	1.4%	0.3%	2.7%	3.3%	1.3%
South/South-East Asia	1.0%	0.2%	-0.2%	1.9%	3.6%
Sub Saharan Africa	0.7%	0.3%	1.6%	0.8%	1.0%
World	1.2%	0.7%	1.0%	2.3%	1.8%
Interpretation. Per capita NDP has been multiplied by about 16 at the global level between 1800 and 2025 (from about 900€ in 1800 to about 14 000€ in 2025) (PPP 2025 €), which corresponds to an average annual real growth rate of 1.2%. The average real growth of per capita NDP has increased from 0.7% over the 1800-1910 period to 1.0% over 1910-1950 and 2.3% and 1.8% over 1950-1990 and 1990-2025. Sources and series: wid.world					

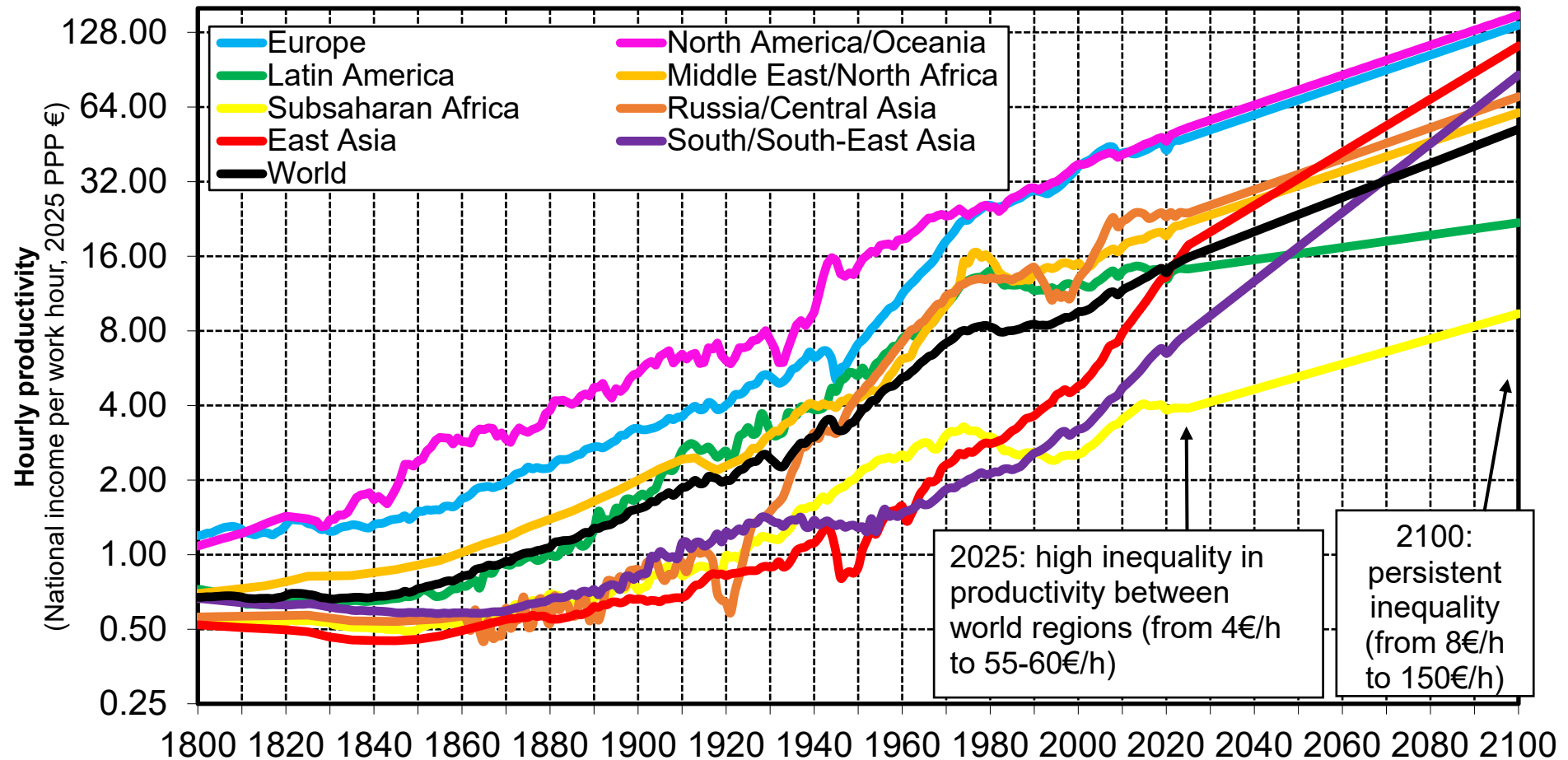
Table C2. Productivity Growth by World Regions (1800-2025)					
Annual real growth rate of productivity (hourly NDP)	1800-2025	1800-1910	1910-1950	1950-1990	1990-2025
East Asia	1.6%	0.2%	0.7%	3.6%	4.6%
Europe	1.7%	1.0%	1.7%	3.6%	1.4%
Latin America	1.3%	1.2%	1.8%	2.0%	0.6%
Middle East/ North Africa	1.5%	1.1%	1.4%	2.9%	1.4%
North America/ Oceania	1.7%	1.6%	2.1%	1.8%	1.6%
Russia/ Central Asia	1.7%	0.5%	4.0%	3.0%	1.5%
South/South-East Asia	1.1%	0.5%	0.4%	1.7%	3.2%
Sub Saharan Africa	0.9%	0.4%	2.4%	0.5%	1.2%
World	1.4%	0.9%	1.7%	2.2%	1.8%
Interpretation. Productivity (as defined by net domestic product per hour of economic labour) has been multiplied by about 24 at the global level between 1800 and 2025 (from about 0.7€/h in 1800 to about 16€/h in 2025) (PPP 2025 €). This corresponds to an average annual real growth rate of 1.4%. Productivity growth has increased from 0.9% over the 1800-1910 period to 1.7% over 1910-1950 and 2.2% and 1.8% over 1950-1990 and 1990-2025. Sources and series: wid.world					

Table C3. The Elasticity of Labor Hours With Respect to Productivity

	Average Annual Labour Hours per Employed Individual (log)			Average Annual Labour Hours per Working-Age Individual (15-64) (log)		
Hourly Productivity (log) (s.e.)	-0.128*** (0.001)	-0.176*** (0.001)	-0.082*** (0.003)	-0.145*** (0.001)	-0.192*** (0.001)	-0.116*** (0.005)
Country Fixed Effects	NO	YES	YES	NO	YES	YES
Period Covered	1800-2025	1800-2025	1980-2025	1800-2025	1800-2025	1980-2025
R2	0.59	0.80	0.76	0.55	0.75	0.73
N.obs	12882	12882	2622	12882	12882	2622

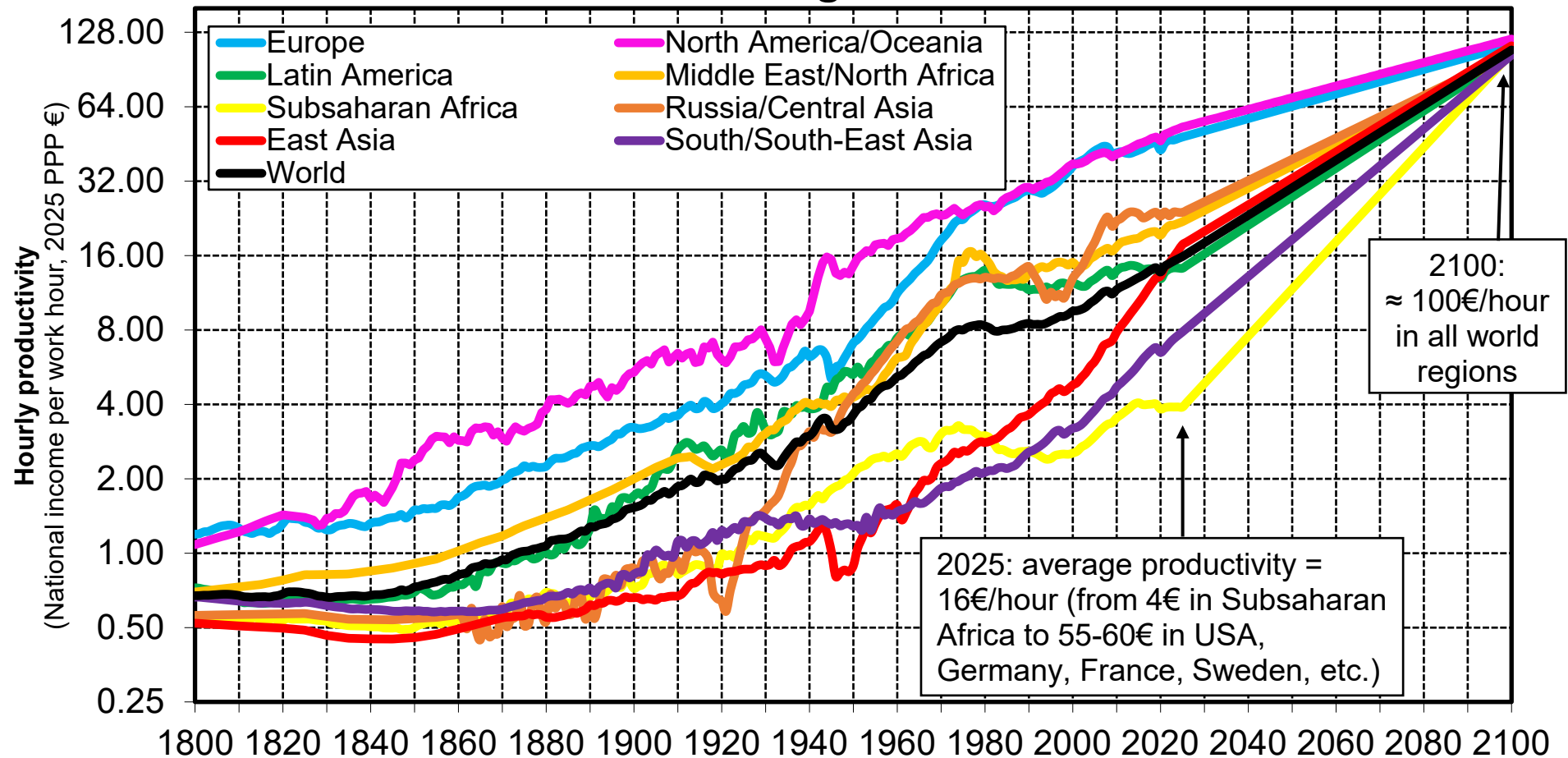
Interpretation. When hourly productivity increases by 1%, labour hours decline by 0.13% (specification without country fixed effects) or by 0.18% (specification with country fixed effects). The estimated coefficients are smaller if we restrict to the post-1980 and do not use the full historical variations.

World Productivity Trends 2025-2100: Business-As-Usual Scenario



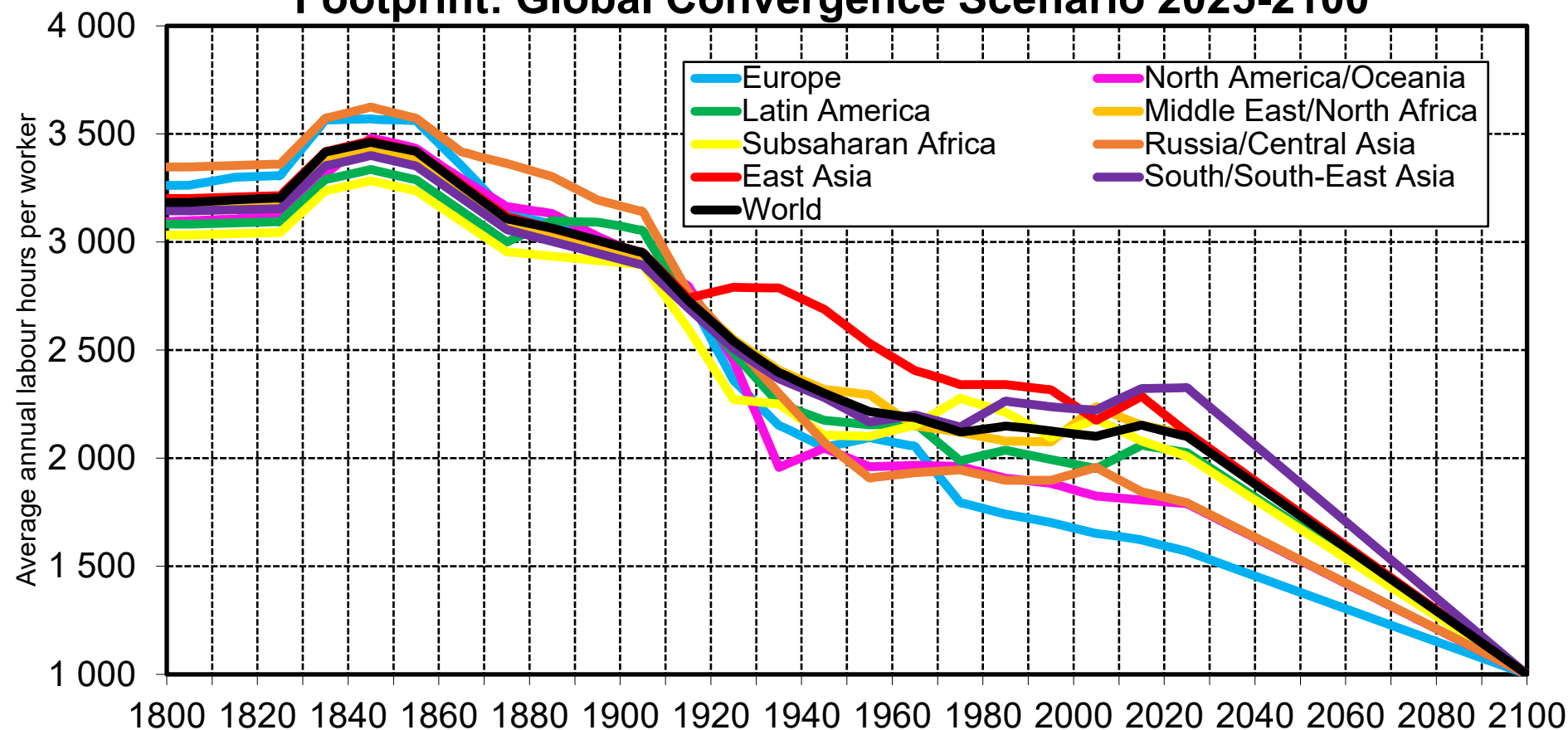
Interpretation. Under the "business-as-usual" scenario (same productivity growth rates as in 1900-2025, with minor changes), inequality in hourly productivity is projected to remain very high between world regions by 2100. In particular, productivity in 2100 would be only 9€/hour in Subsaharan Africa (with a population reaching 3.3b in 2100, vs 1.3b in 2025 according to UN central scenario). **Sources and series:** see wid.world

World Productivity Trends 2025-2100: Global Convergence Scenario



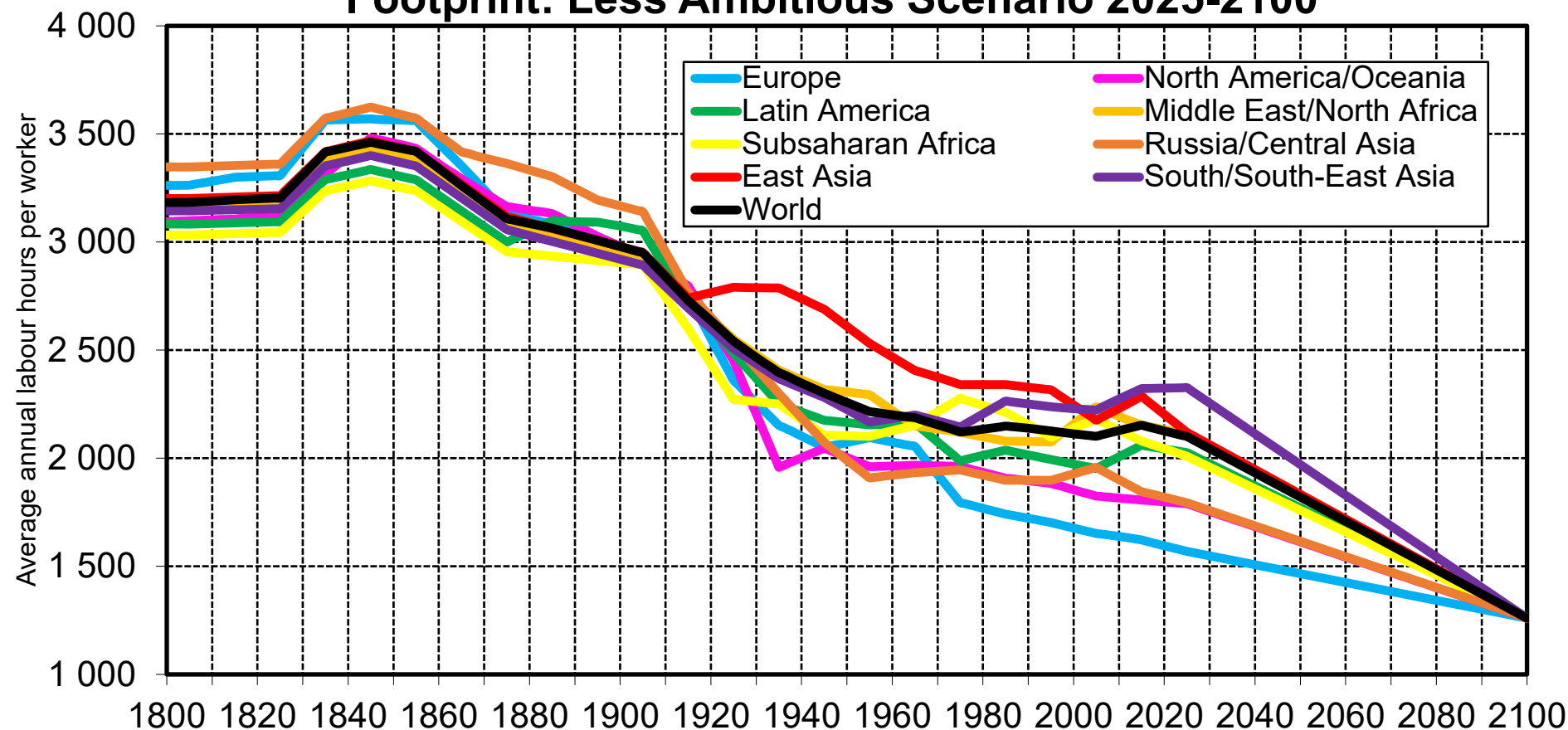
Interpretation. Under the "global convergence" scenario, productivity growth rates are assumed to be such that all regions converge to about 100-120€/hour by 2100. This requires in particular a large acceleration of productivity growth in Subsaharan Africa (4.5% per year over 2025-2100 period, i.e. about the same as in East Asia 1990-2025). **Sources and series:** see wid.world

Using Productivity Gains to Reduce Work Hours & Material Footprint: Global Convergence Scenario 2025-2100



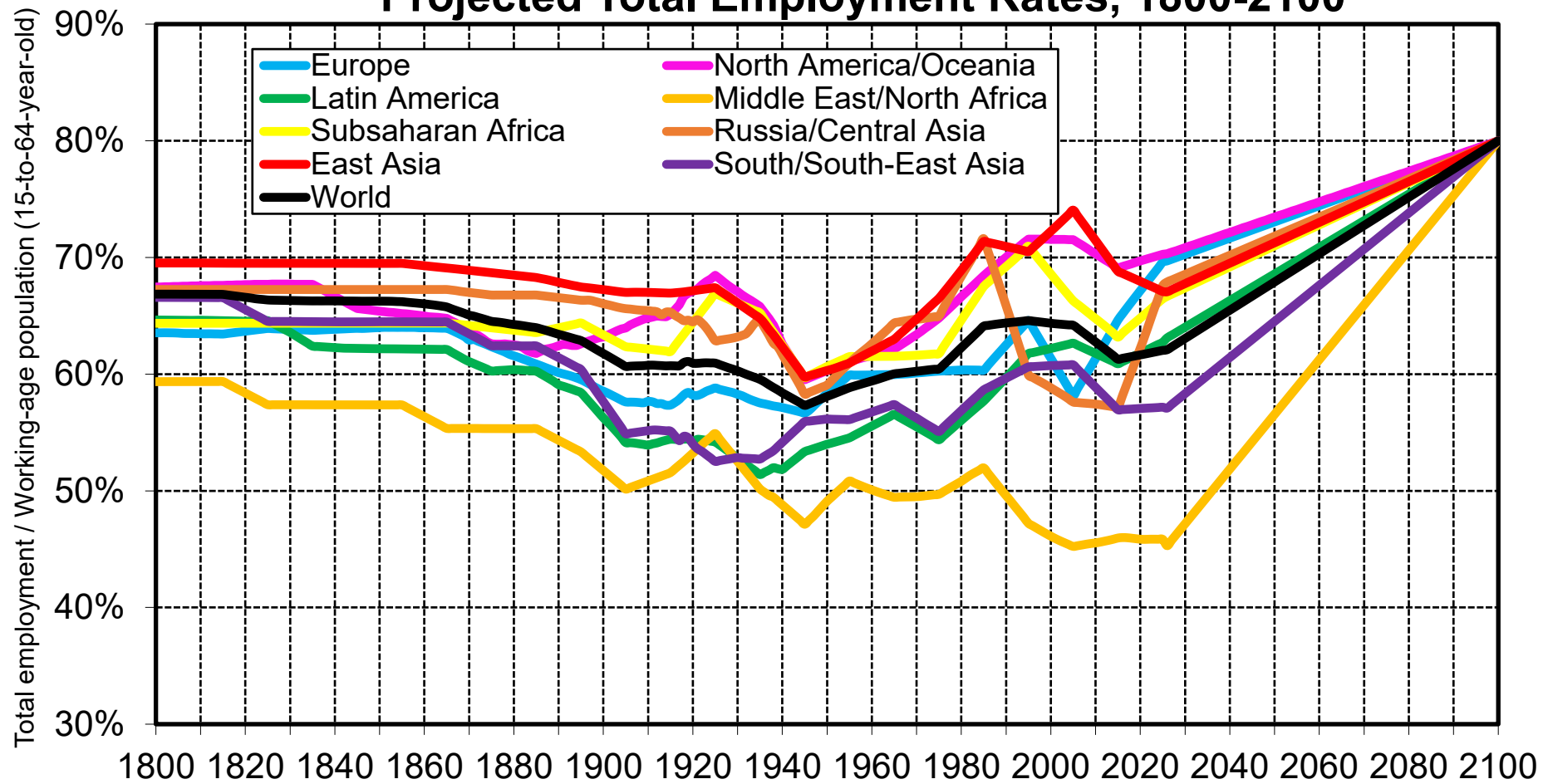
Interpretation. According to the global convergence scenario, annual labour hours per work should decline around 1250 hours per worker in all world regions around 2100. Note. Annual labour hours around 3000-3500 hours correspond to about 60-65 hours per week all year long. Annual hours around 2000 hours correspond to 40 hours per week during 50 weeks (2 weeks in paid vacation); annual hours around 1600 hours correspond to 35 hours per week during 47 weeks (5 weeks in paid vacation); annual hours around 1000 hours correspond to 25 hours per week during 40 weeks (12 weeks in paid vacation). **Sources and series:** see wid.world

Using Productivity Gains to Reduce Work Hours & Material Footprint: Less Ambitious Scenario 2025-2100



Interpretation. According to the global convergence scenario, annual labour hours per work should decline around 1250 hours per worker in all world regions around 2100. Note. Annual labour hours around 3000-3500 hours correspond to about 60-65 hours per week all year long. Annual hours around 2000 hours correspond to 40 hours per week during 50 weeks (2 weeks in paid vacation); annual hours around 1600 hours correspond to 35 hours per week during 47 weeks (5 weeks in paid vacation); annual hours around 1260 hours correspond to 30 hours per week during 42 weeks (10 weeks in paid vacation). **Sources and series:** see wid.world

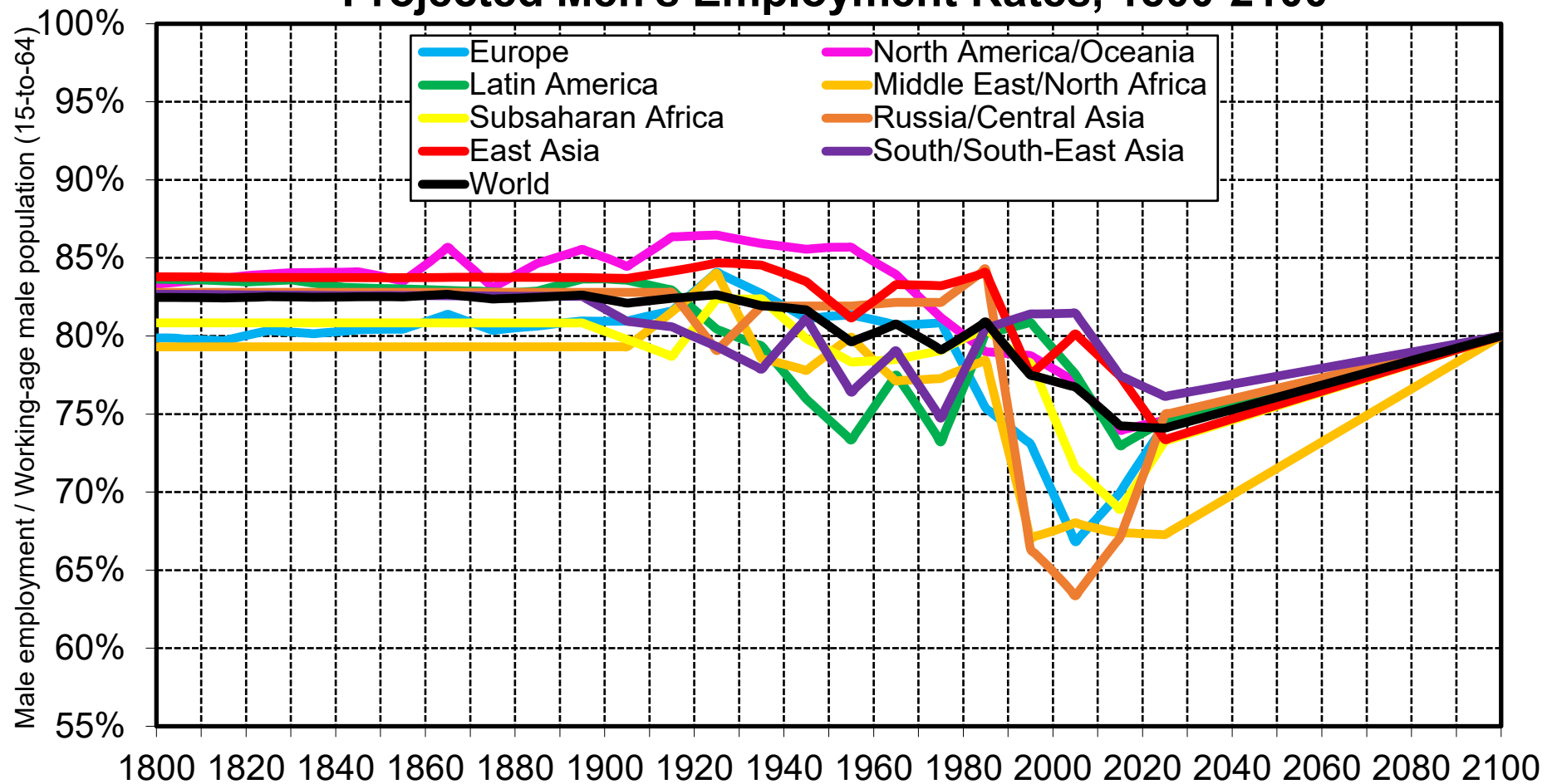
Projected Total Employment Rates, 1800-2100



Interpretation. In the global convergence the scenario, the employment rate, defined as the ratio between total employment (irrespective of employment status or sector) and working-age population (15-to-64-year-old), is expected to converge toward 80% in all world regions by 2100, both for men and women.

Sources and series: see wid.world

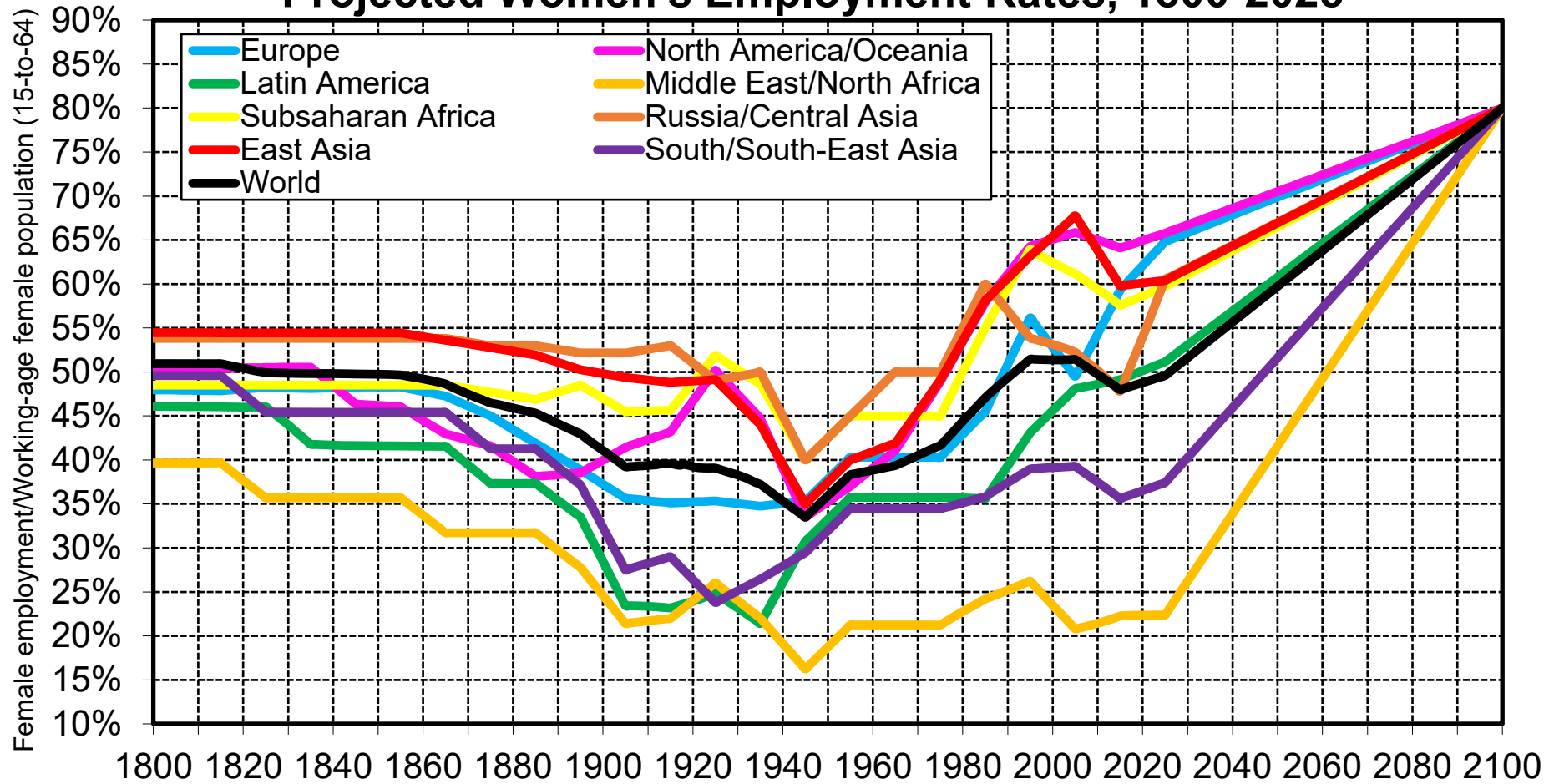
Projected Men's Employment Rates, 1800-2100



Interpretation. In the global convergence the scenario, the employment rate, defined as the ratio between total employment (irrespective of employment status or sector) and working-age population (15-to-64-year-old), is expected to converge toward 80% in all world regions by 2100, both for men and women.

Sources and series: see wid.world

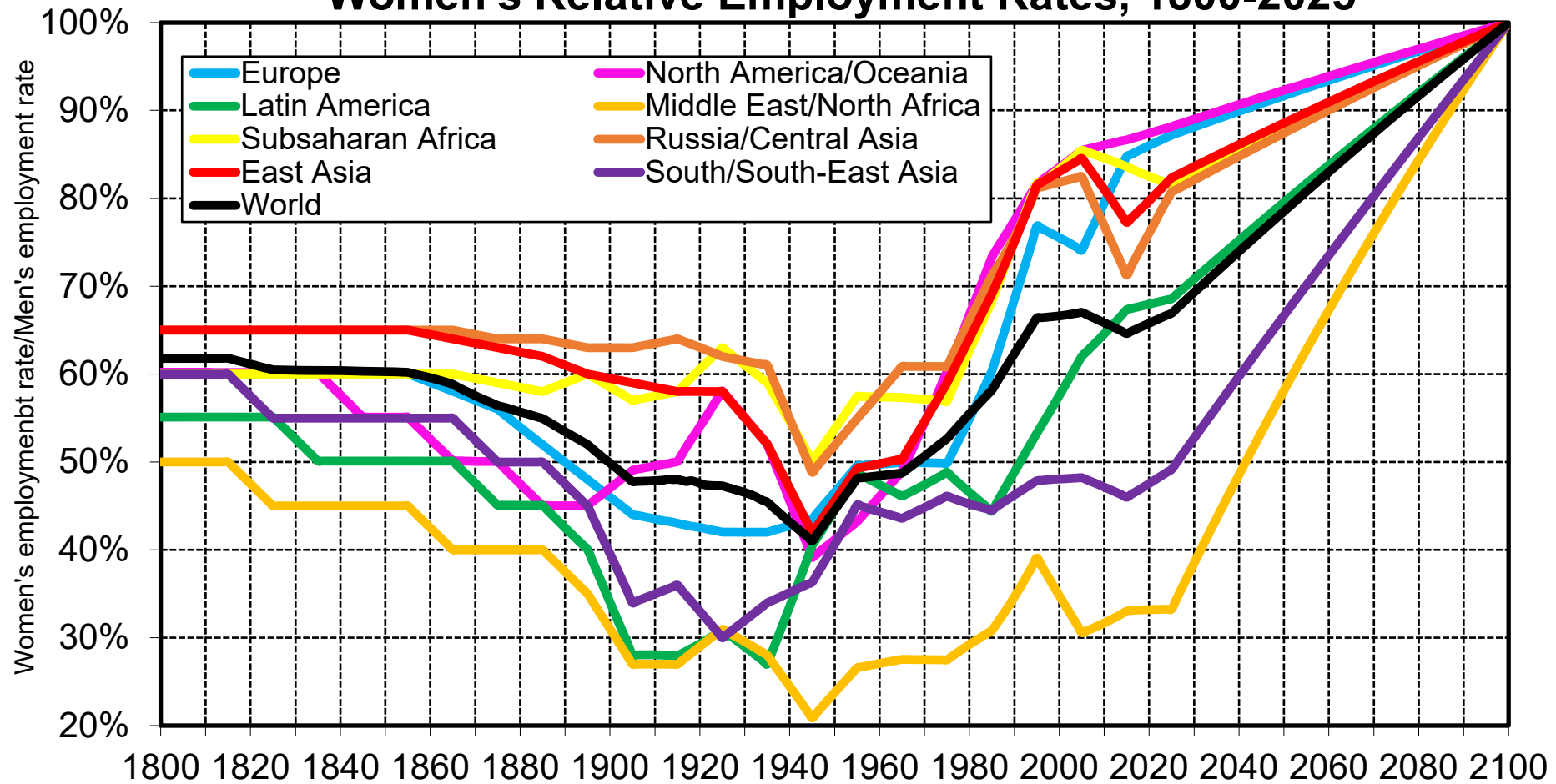
Projected Women's Employment Rates, 1800-2025



Interpretation. In the global convergence the scenario, the employment rate, defined as the ratio between total employment (irrespective of employment status or sector) and working-age population (15-to-64-year-old), is expected to converge toward 80% in all world regions by 2100, both for men and women.

Sources and series: see wid.world

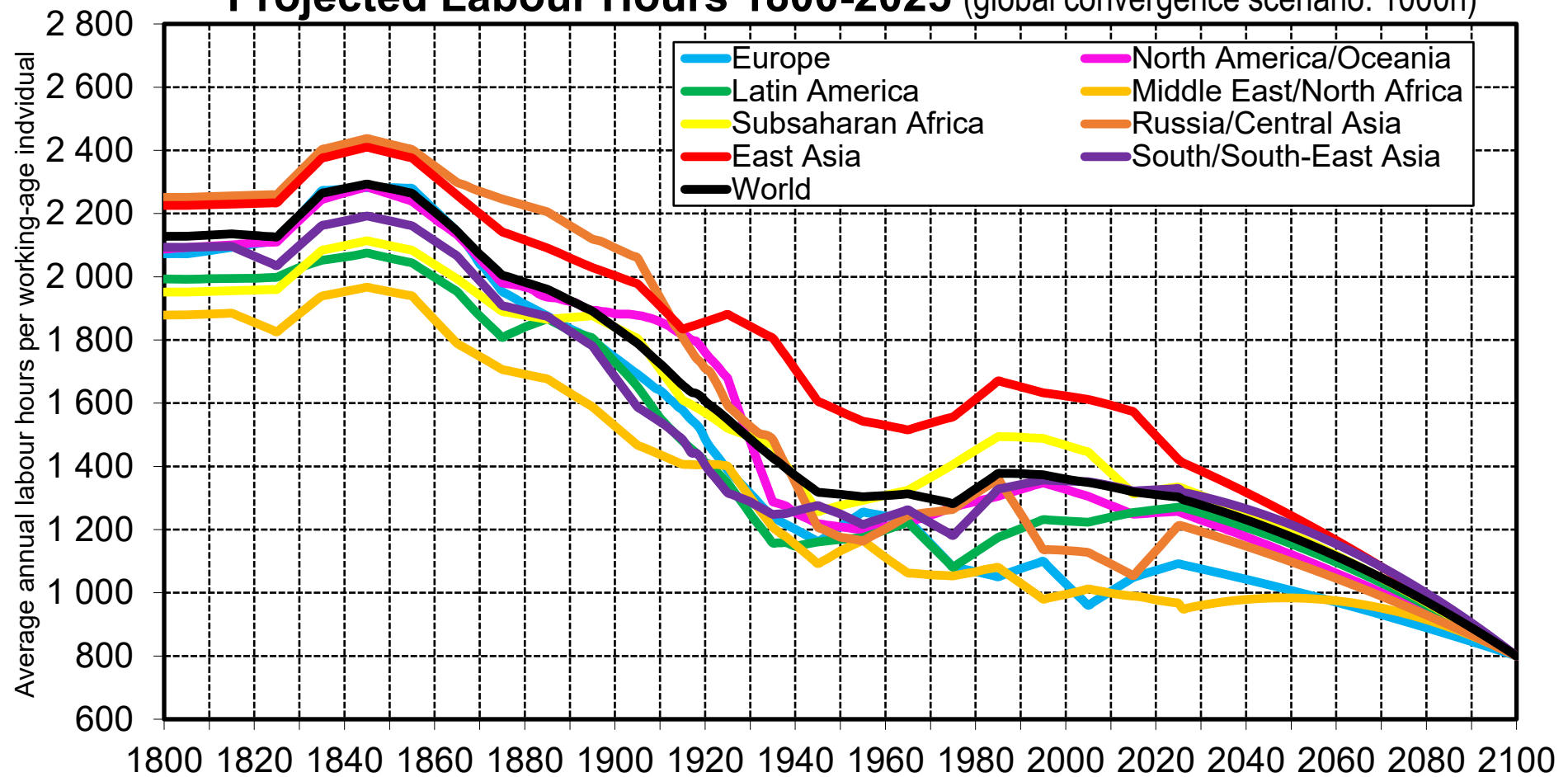
Women's Relative Employment Rates, 1800-2025



Interpretation. In the global convergence the scenario, the employment rate, defined as the ratio between total employment (irrespective of employment status or sector) and working-age population (15-to-64-year-old), is expected to converge toward 80% in all world regions by 2100, both for men and women, so that the relative women/men employment rate converges toward 100% everywhere.

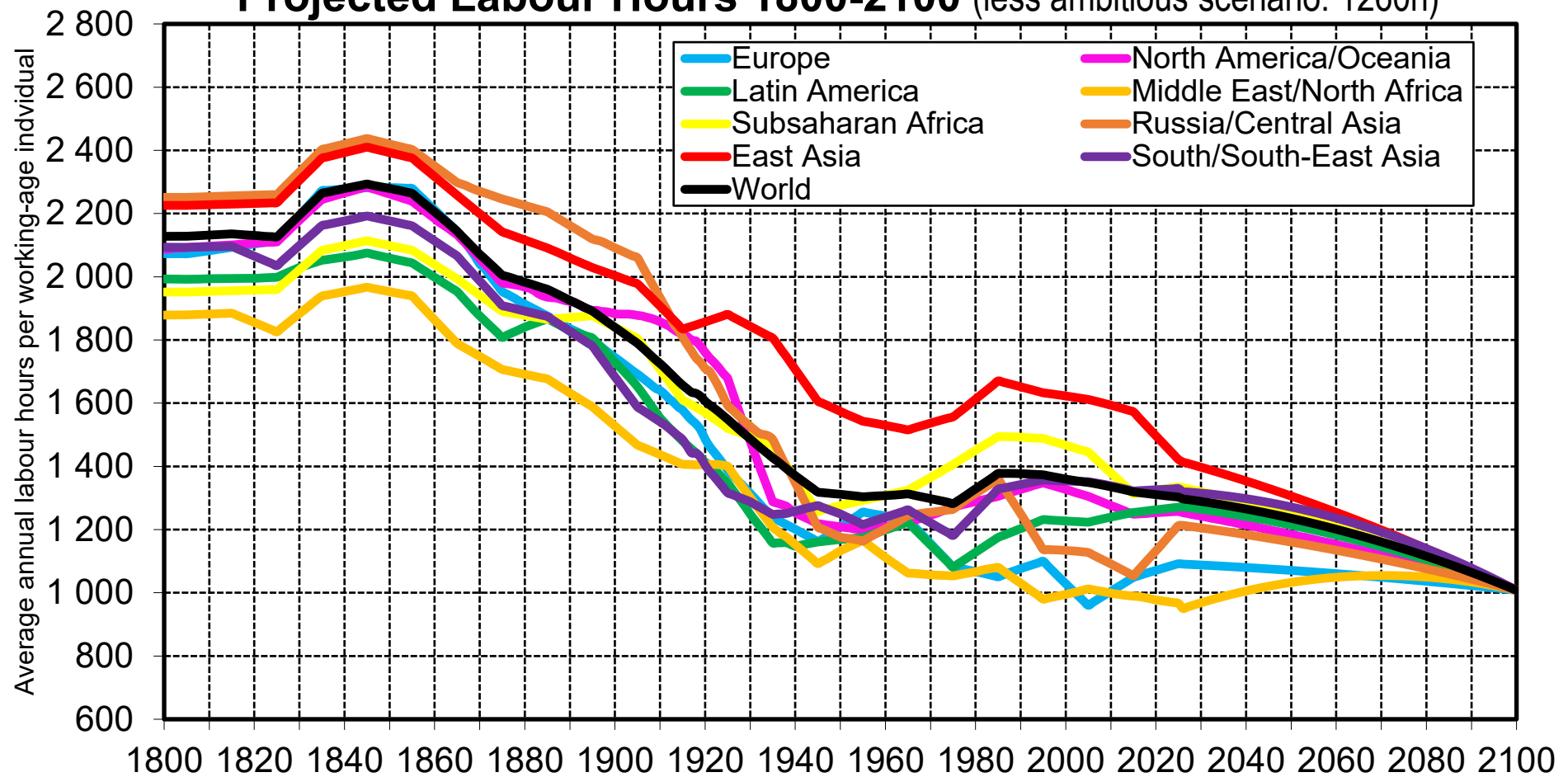
Sources and series: see wid.world

Projected Labour Hours 1800-2025 (global convergence scenario: 1000h)



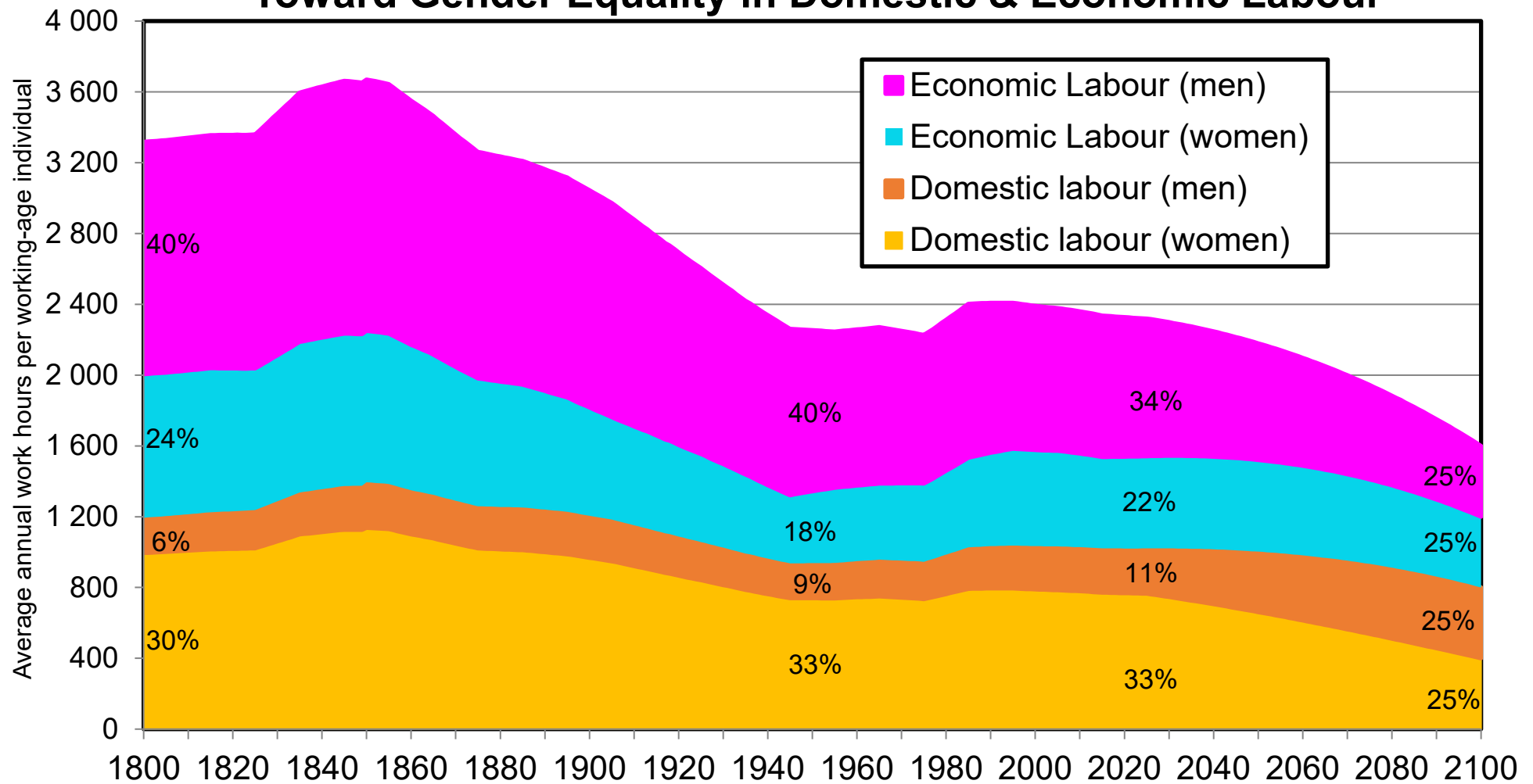
Interpretation. In the global convergence scenario, average economic labour hours per working-age individual (15-to-64-year-old) converge toward 800 hours (1000 hours x 80% employment rate) in all world regions. **Sources and series:** see wid.world

Projected Labour Hours 1800-2100 (less ambitious scenario: 1260h)



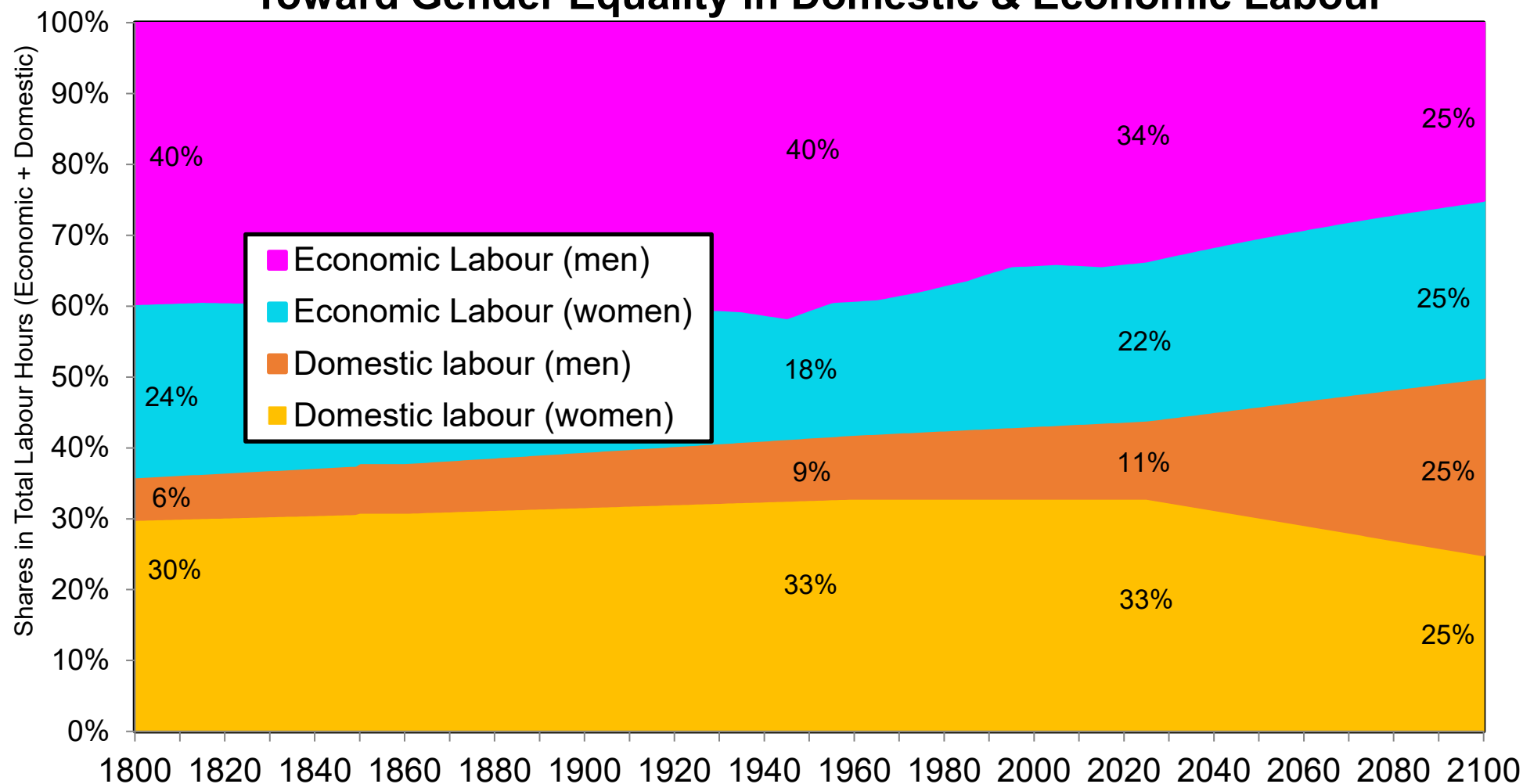
Interpretation. In the less ambitious scenario, average economic labour hours per working-age individual (15-to-64-year-old) converge toward 1014 hours (1260 hours x 80% employment rate) in all world regions. **Sources and series:** see wid.world

The Structural Transformation of Work 1800-2100: Toward Gender Equality in Domestic & Economic Labour



Interpretation. In the global convergence scenario, working-age men and women are projected to supply the same quantity of economic labour and domestic labour and to receive equal average pay. This would represent a continuation of the trend toward gender equality observed between 1950 and 2025, albeit with a major acceleration. **Sources and series:** wid.world

The Structural Transformation of Work 1800-2100: Toward Gender Equality in Domestic & Economic Labour



Interpretation. In the global convergence scenario, working-age men and women are projected to supply the same quantity of economic labour and domestic labour and to receive equal average pay. This would represent a continuation of the trend toward gender equality observed between 1950 and 2025, albeit with a major acceleration. **Sources and series:** wid.world

Table D1. Projections for Productivity Growth (2025-2100)					
	Productivity 2025 (hourly NDP) (PPP € 2025)	Business-as-Usual Scenario		Global Convergence Scenario	
		Productivity growth rate 2025-2100	Productivity 2100 (PPP € 2025)	Productivity growth rate 2025-2100	Productivity 2100 (PPP € 2025)
East Asia	17.7	2.5%	112.8	2.5%	112.8
Europe	48.2	1.4%	136.8	1.2%	113.7
Latin America	14.2	0.6%	21.8	2.7%	104.7
Middle East/ North Africa	21.9	1.4%	60.7	2.1%	104.1
North America/ Oceania	52.9	1.4%	150.1	1.1%	120.2
Russia/ Central Asia	23.9	1.5%	70.4	2.0%	105.5
South/South-East Asia	7.8	3.2%	86.2	3.5%	103.6
Sub Saharan Africa	3.9	1.2%	9.4	4.5%	105.7
World	15.8	1.6%	52.1	2.6%	108.5
Interpretation. In the "business-as-usual" scenario, productivity growth in 2025-2100 is the same as in 1900-2025 (except in East Asia, where it is assumed to drop from 4.4% to 2.5% as the region catches up with the world productivity frontier, and in Europe/NAOC, where it is assumed to drop from 1.6-1.7% to 1.4%). In the "global convergence" scenario, productivity growth rates are assumed to be such that all regions converge to about 100-120€ in hourly productivity by 2100. This requires in particular a large acceleration of productivity growth in Subsaharan Africa, thanks to massive investment in human capital and infrastructures. Sources and series: wid.world					

Table D2. Using Productivity Gains to Reduce Work Time & Material Footprint Global Convergence Scenario: 1000h worktime in 2100 (25h x 40w)					
	Productivity 2025 (hourly NDP) (PPP € 2025)	Living Standards 2025 (per capita NDP) (PPP € 2025)	Productivity 2100 (hourly NDP) (PPP € 2025)	Living Standards 2100 (per capita NDP) (PPP € 2025)	Share of Productivity Gains Devoted to Extra Leisure (vs Extra Production)
East Asia	17.7	17 423	112.8	54 138	51%
Europe	48.2	35 031	113.7	54 568	34%
Latin America	14.2	12 793	104.7	50 273	47%
Middle East/ North Africa	21.9	14 511	104.1	49 984	28%
North America/ Oceania	52.9	44 755	120.2	57 690	43%
Russia/ Central Asia	23.9	19 276	105.5	50 643	41%
South/South-East Asia	7.8	7 373	103.6	49 713	49%
Sub Saharan Africa	3.9	3 024	105.7	50 757	38%
World	15.8	13 931	108.5	52 088	45%
Interpretation. According to the "global convergence" scenario, 45% of productivity gains will be devoted to extra leisure (as opposed to extra production) at the global level over the 2025-2100 period. Note. Computations are made under the assumption that employment rate converges to 80% for working-age men and women in 2100 and that fraction of working-age population in total population is equal to 60% in 2100. Sources and series: wid.world					

Table D3. Using Productivity Gains to Reduce Work Time & Material Footprint Less Ambitious Scenario: 1260h worktime 2100 (30h x 42w)					
	Productivity 2025 (hourly NDP) (PPP € 2025)	Living Standards 2025 (per capita NDP) (PPP € 2025)	Productivity 2100 (hourly NDP) (PPP € 2025)	Living Standards 2025 (per capita NDP) (PPP € 2025)	Share of Productivity Gains Devoted to Extra Leisure (vs Extra Production)
East Asia	17.7	17 423	112.8	68 214	39%
Europe	48.2	35 031	113.7	68 756	17%
Latin America	14.2	12 793	104.7	63 344	33%
Middle East/ North Africa	21.9	14 511	104.1	62 980	9%
North America/ Oceania	52.9	44 755	120.2	72 689	29%
Russia/ Central Asia	23.9	19 276	105.5	63 810	25%
South/South-East Asia	7.8	7 373	103.6	62 639	36%
Sub Saharan Africa	3.9	3 024	105.7	63 954	22%
World	15.8	13 931	108.5	65 631	31%
Interpretation. According to the less ambitious scenario, 31% of productivity gains will be devoted to extra leisure (as opposed to extra production) at the global level over the 2025-2100 period. Note. Computations are made under the assumption that employment rate converges to 80% for working-age men and women in 2100 and that fraction of working-age population in total population is equal to 60% in 2100. Sources and series: wid.world					

Table D4. Using Productivity Gains to Reduce Work Time: Lessons from the Past and Scenarios for the Future	
	Share of Productivity Gains Devoted to Extra Leisure (vs Extra Production)
1800-2025	33%
incl. 1800-1860	-4%
incl. 1860-1980	41%
incl. 1980-2025	-8%
Global Convergence Scenario 2025-2100 (Target 2100: 1000h = 25h/w x 40w)	45%
Less Ambitious Scenario 2025-2100 (Target 2100: 1260h = 30h/w x 42w)	31%
Interpretation. According to the "global convergence" scenario, 45% of productivity gains will be devoted to extra leisure (as opposed to extra production) at the global level over the 2025-2100 period. This is roughly in line with the historical record observed during the 1860-1980 period (slightly more ambitious). Sources and series: wid.world	