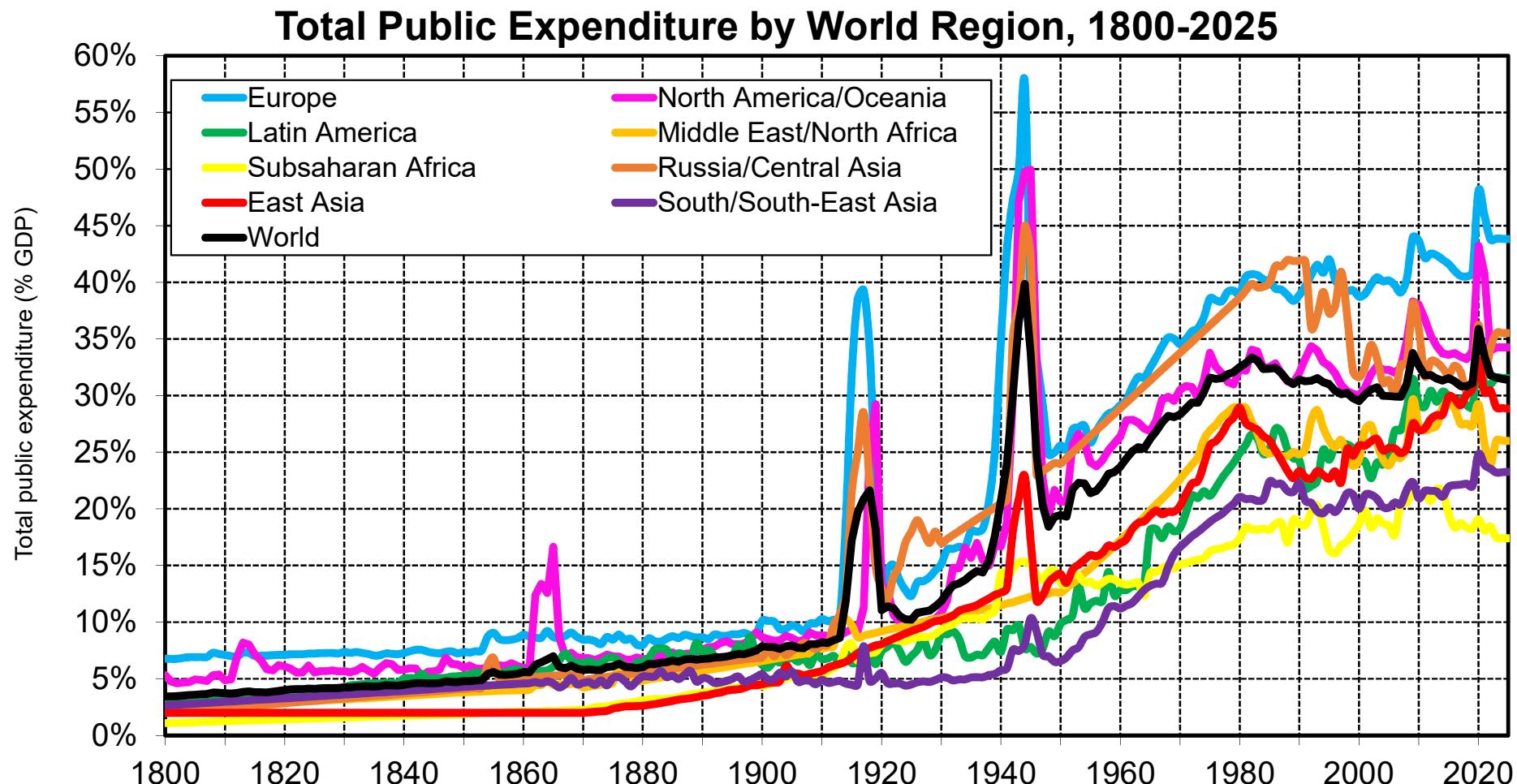
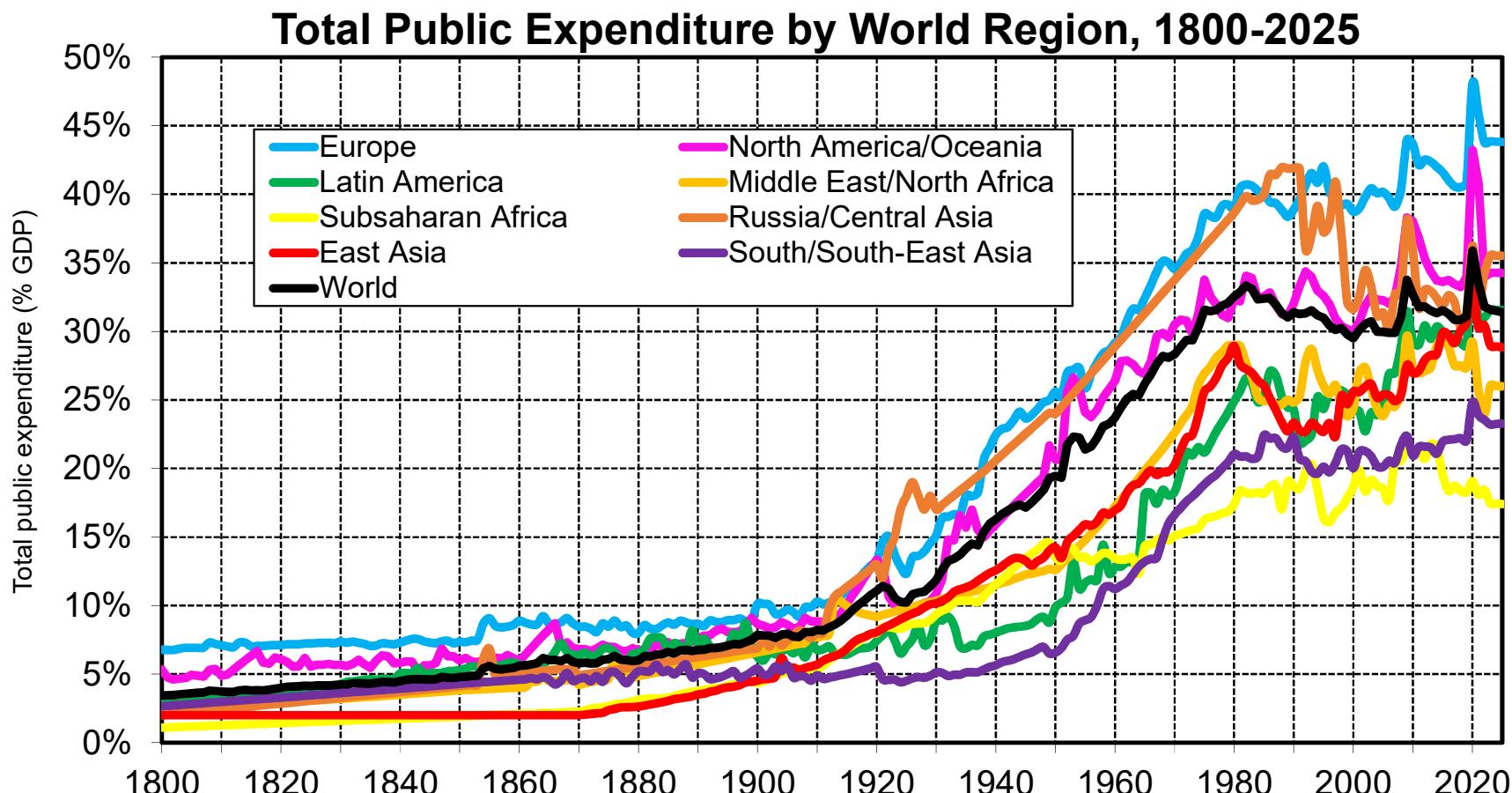


The World Human Capital Expenditure Database (WHCE): Geographical Coverage (57 core territories = 48 main countries + 9 residual regions)	
East Asia (5)	China, Japan, South Korea, Tai <i>wan</i> Other EASA
Europe (11)	Britain, Denmark, France, Germany, Italy, Netherlands, Norway, Spain, Sweden, Other W.EUR, Other E.EUR
Latin America (6)	Argentina, Brasil, Chile, Colombia Mexico, Other LATAM
Middle East/ North Africa (8)	Algeria, Egypt, Iran, Morocco, Saudi Arabia, Turkey, UAE, Other MENA
North America/ Oceania (5)	USA, Canana, Australia, New Zealand Other NAOC
Russia/ Central Asia (2)	Russia Other RUCA
South/South-East Asia (9)	Bengladesh, India, Indonesia, Myanmar, Pakistan, Philipinnes, Thailand, Vietnam, Other SSEA
Sub-Saharan Africa (11)	DR Congo, Ethiopia, Kenya, Ivory Coast, Mali, Niger, Nigeria, Rwanda, Sudan, South Africa, Other SSAF

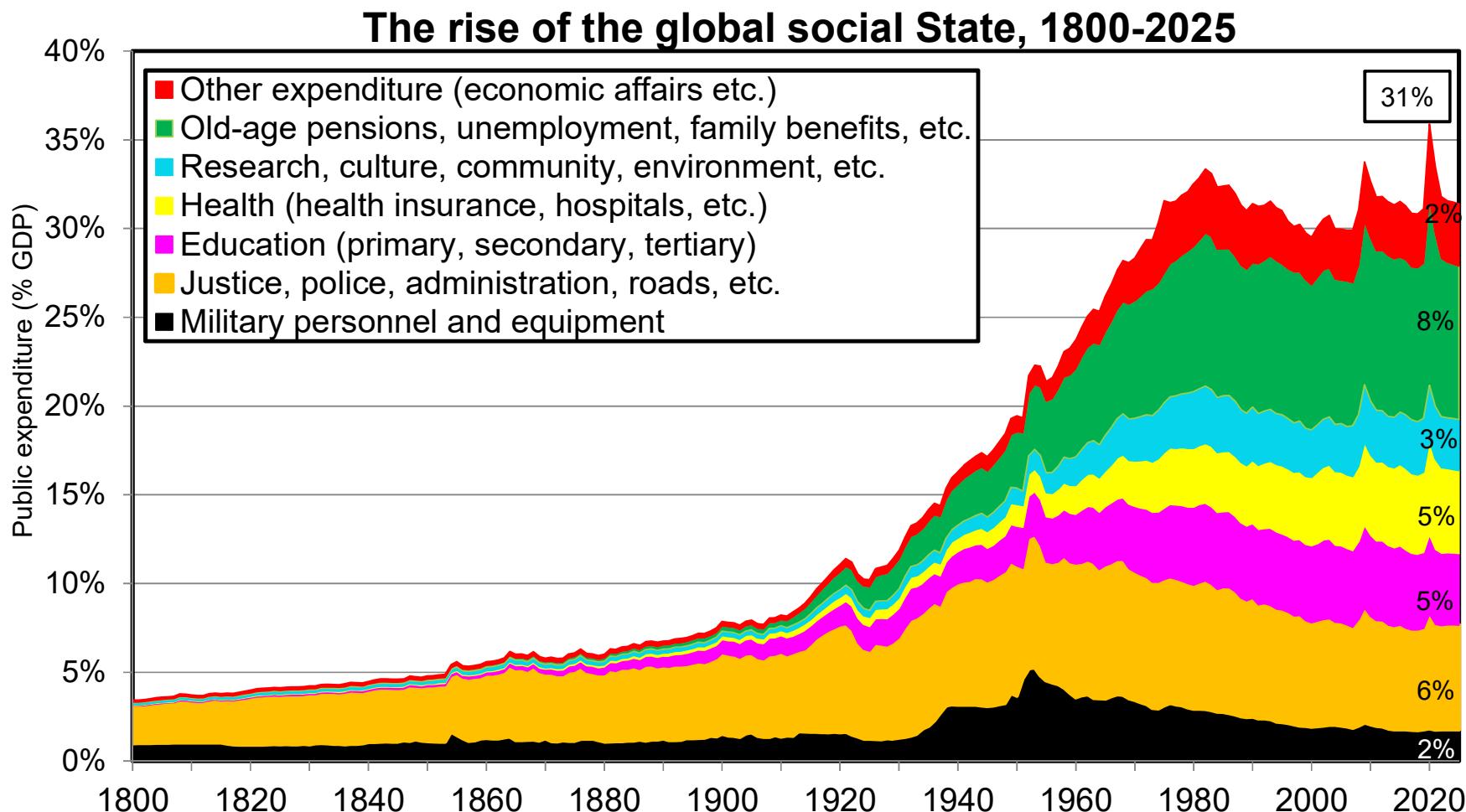
Interpretation. The World Human Capital Expenditure Database (WHCE, whce.world) provides data series for 57 core territories (48 main countries + 9 residual regions, which we define using fixed 2025 borders) covering the entire world over the 1800-2025 period. The database includes series on public expenditure and revenue and their components, expressed as % of GDP. It also includes series on private education & health expenditure and age-adjusted education and health expenditure. Over the recent decades (1980-2025), we provide similar series for 216 core countries and jurisdictions (168 of which define the 9 residual regions), again with fixed 2025 borders, and with additional decompositions (e.g. for primary, secondary and tertiary education). All series are also available and will be regularly updated in the World Inequality Database (wid.world).



Interpretation. Total public expenditure rose from about 3% of global GDP in 1800 to about 31% in 2025, with large regional variations and major spikes around WW1 and WW2. Total public expenditure includes all expenditures by all public administrations (including central and local government, social security funds, etc.), except interest payments. **Sources and series:** wid.world

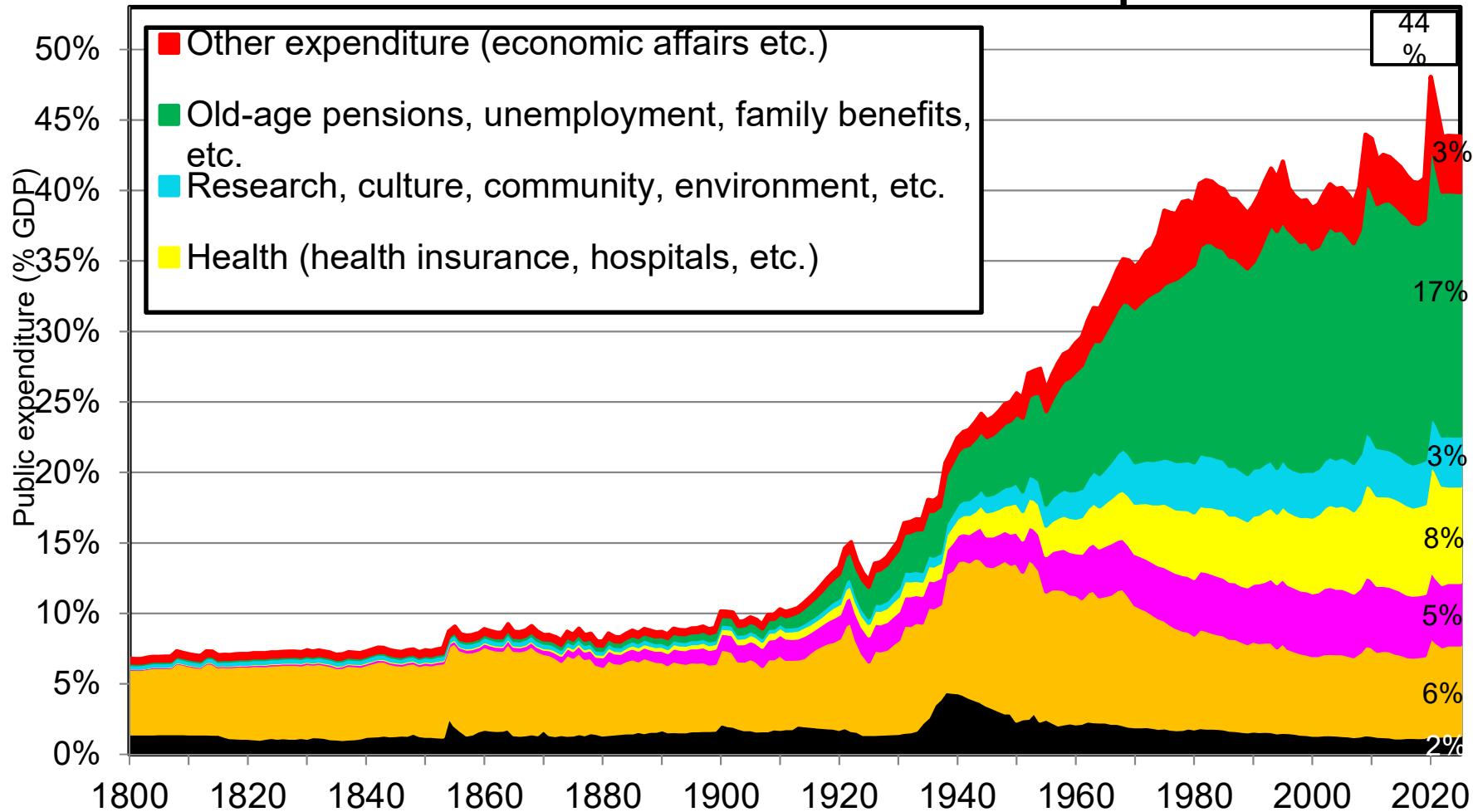


Interpretation. Total public expenditure rose from about 3% of global GDP in 1800 to about 31% in 2025, with large regional variations. Total public expenditure includes all expenditures by all public administrations (including central and local government, social security funds, etc.), except interest payments (and except exceptional expenditure during world wars). **Sources and series:** wid.world



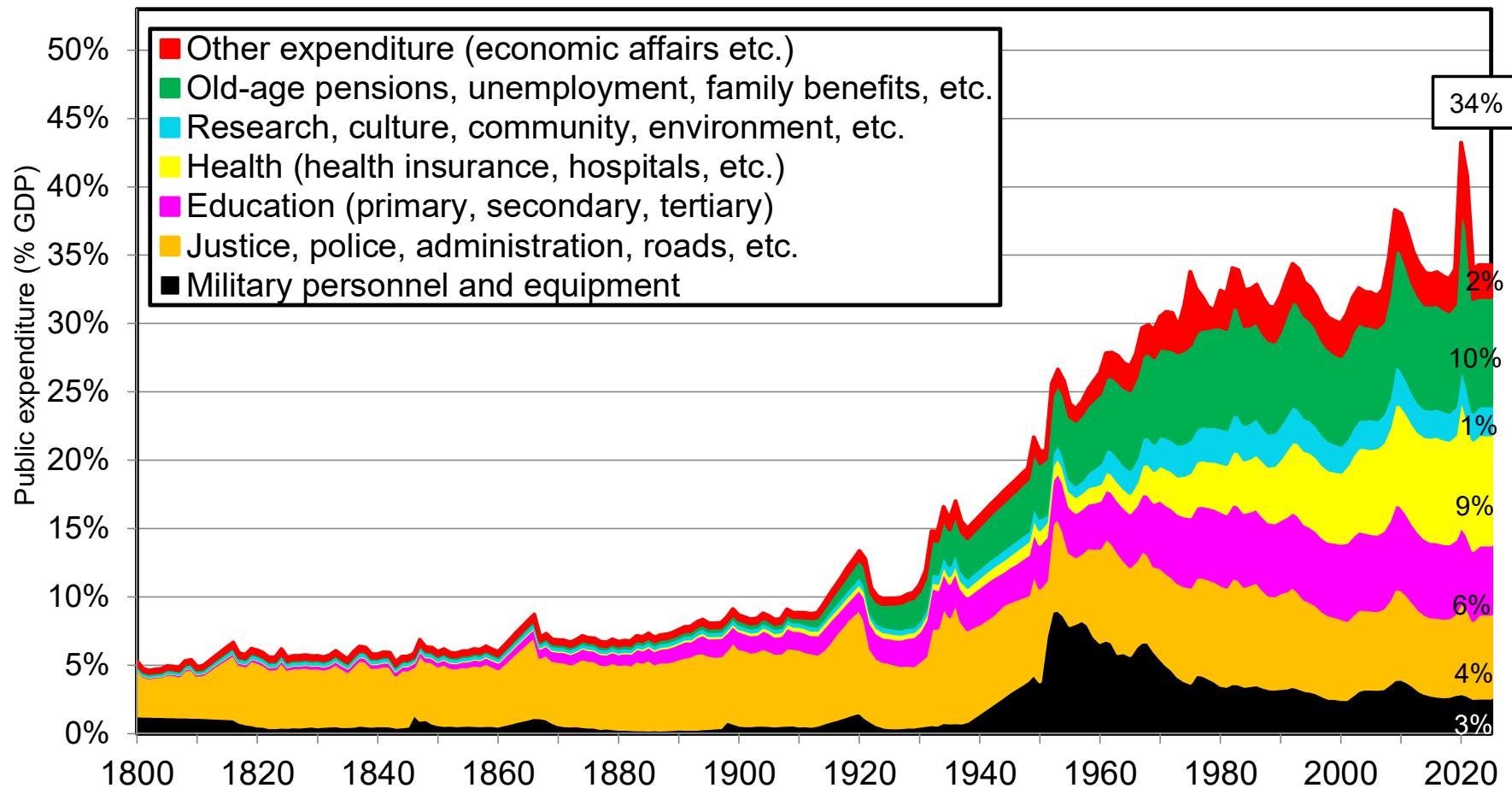
Interpretation. In 2025, total public expenditure amounts to about 31% of global GDP (PPP), including about 2% for military expenditure, 6% for general public services (justice, police, general administration, roads, etc.), 5% for education, 5% for health, 3% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 8% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 2% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: Europe



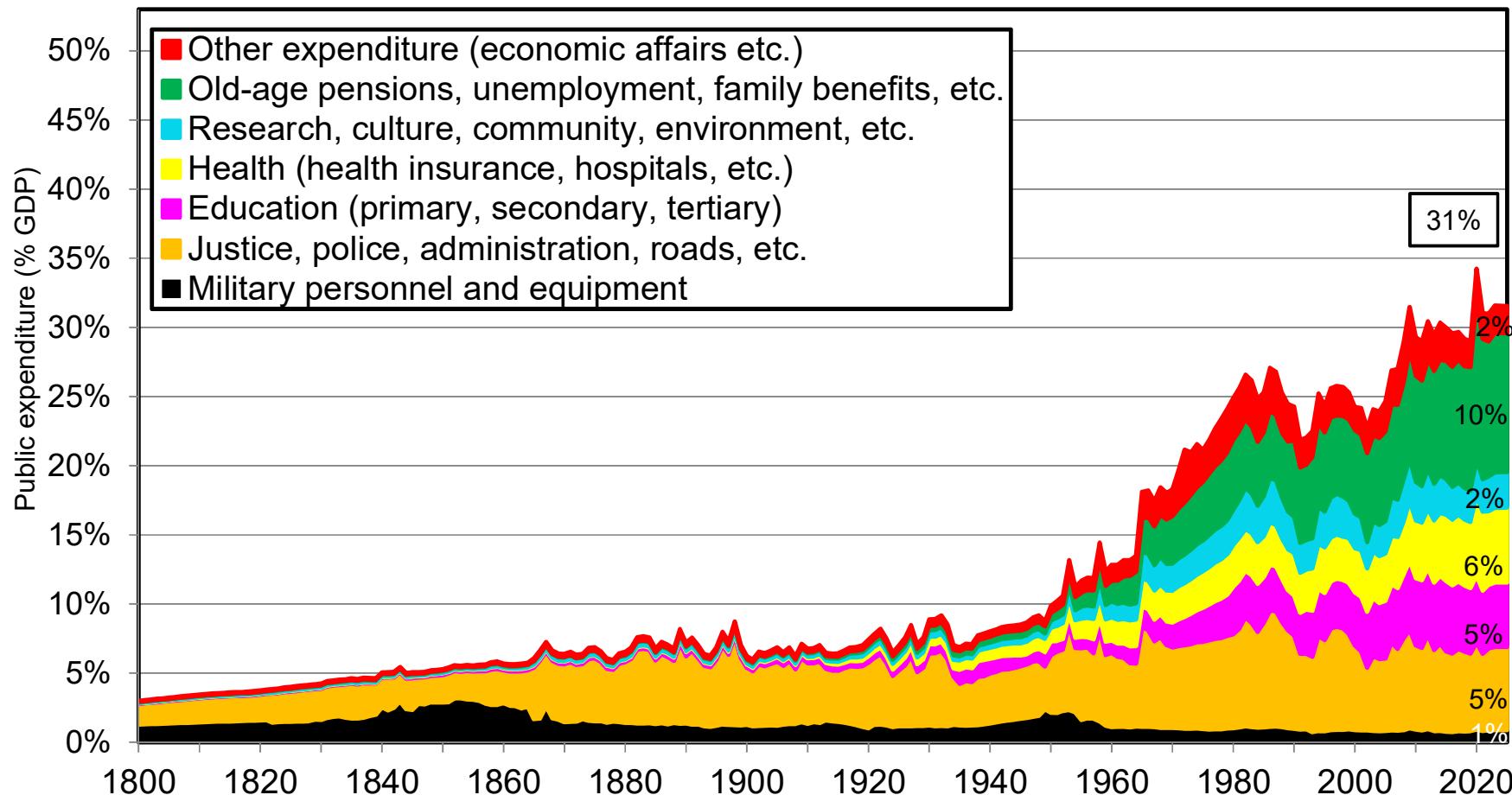
Interpretation. In 2025, total public expenditure amounts to about 44% of GDP in Europe, including about 2% for military expenditure, 6% for general public services (justice, police, general administration, roads, etc.), 5% for education, 8% for health, 3% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 17% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 3% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: North America/Oceania



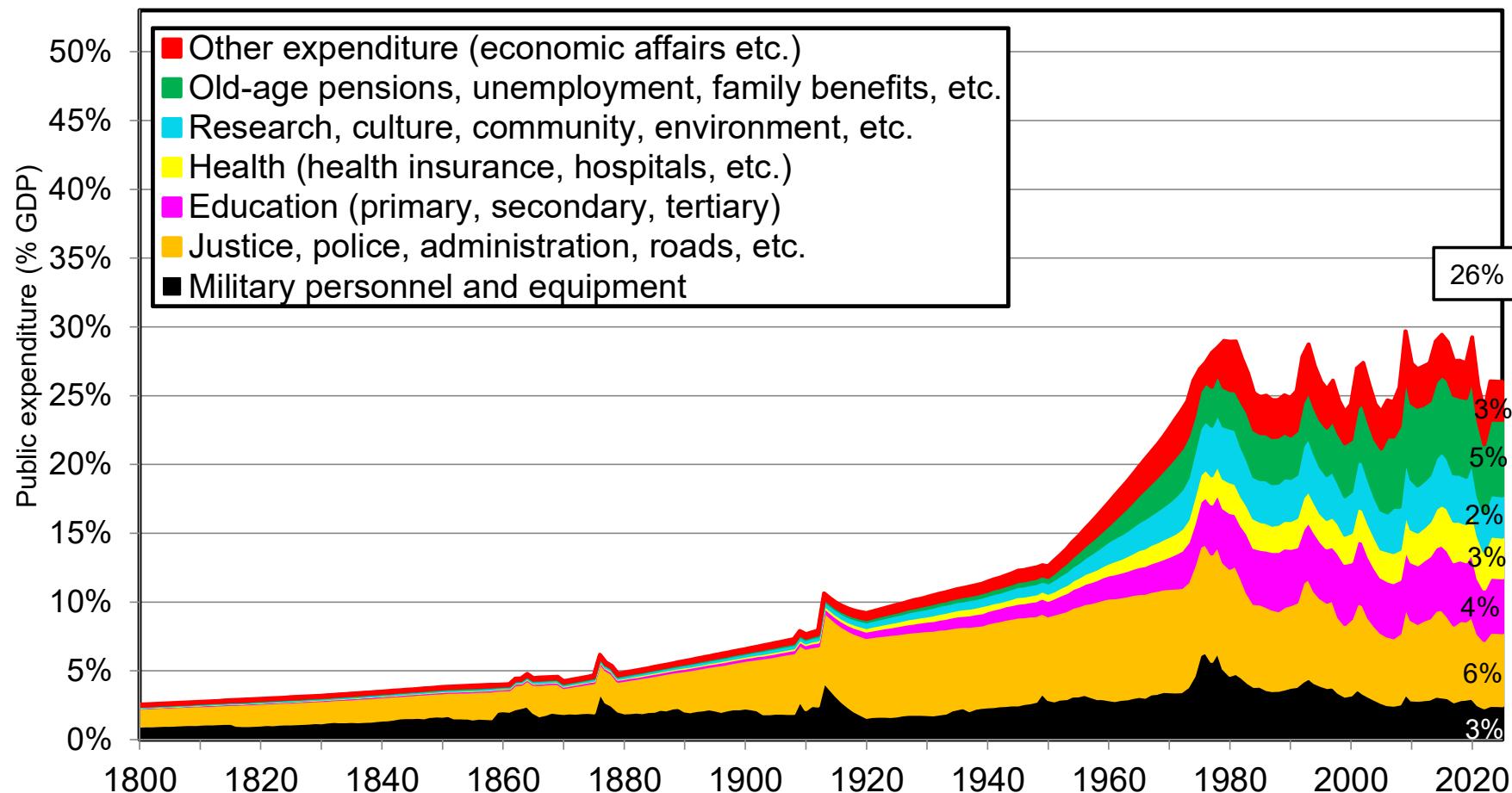
Interpretation. In 2025, total public expenditure amounts to about 34% of GDP in North America/Oceania, including about 3% for military expenditure, 4% for general public services (justice, police, general administration, roads, etc.), 6% for education, 9% for health, 1% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 10% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 2% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: Latin America



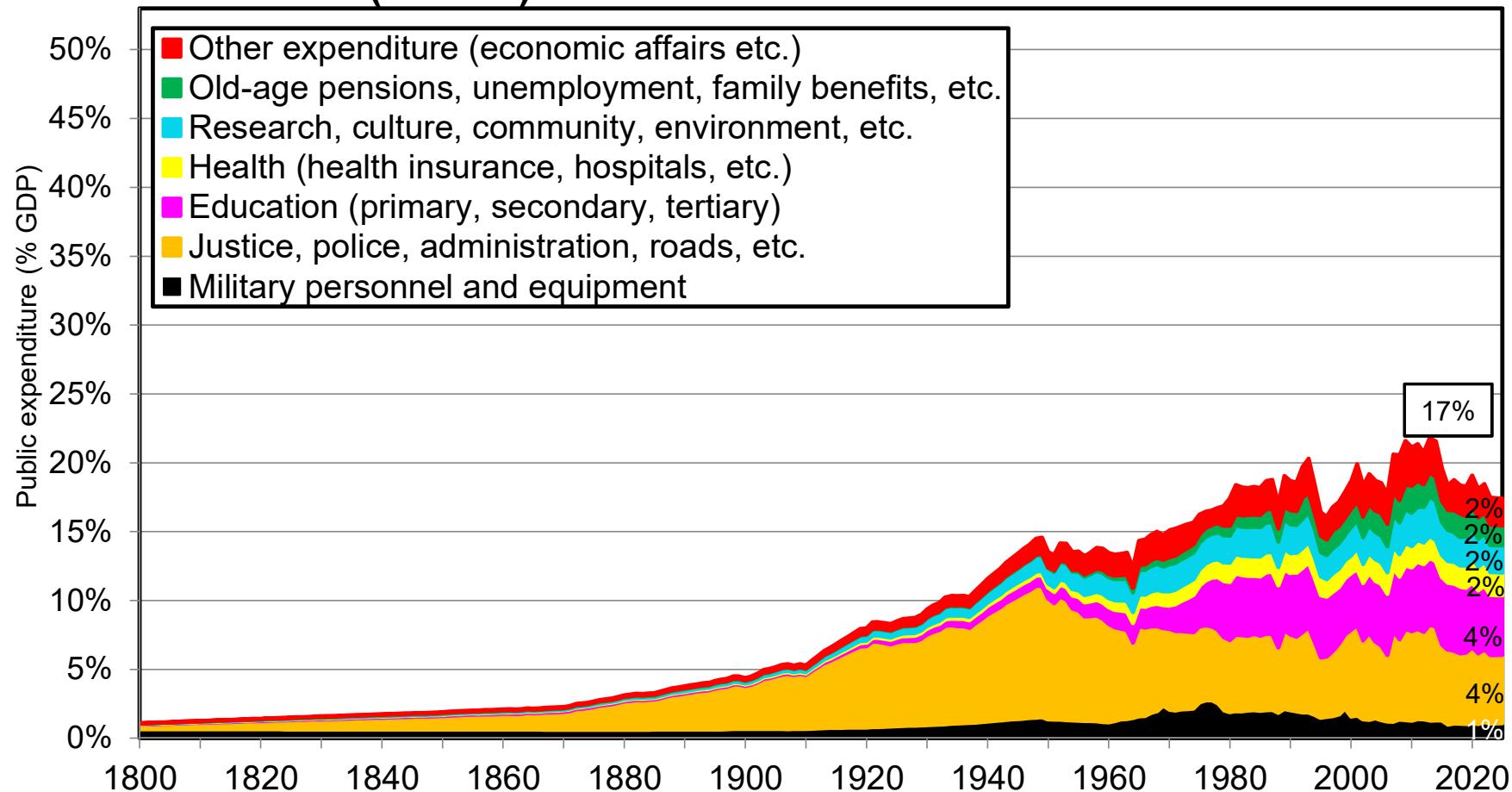
Interpretation. In 2025, total public expenditure amounts to about 31% of GDP in Latin America, including about 1% for military expenditure, 5% for general public services (justice, police, general administration, roads, etc.), 5% for education, 6% for health, 2% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 10% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 2% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: Middle-East/North Africa



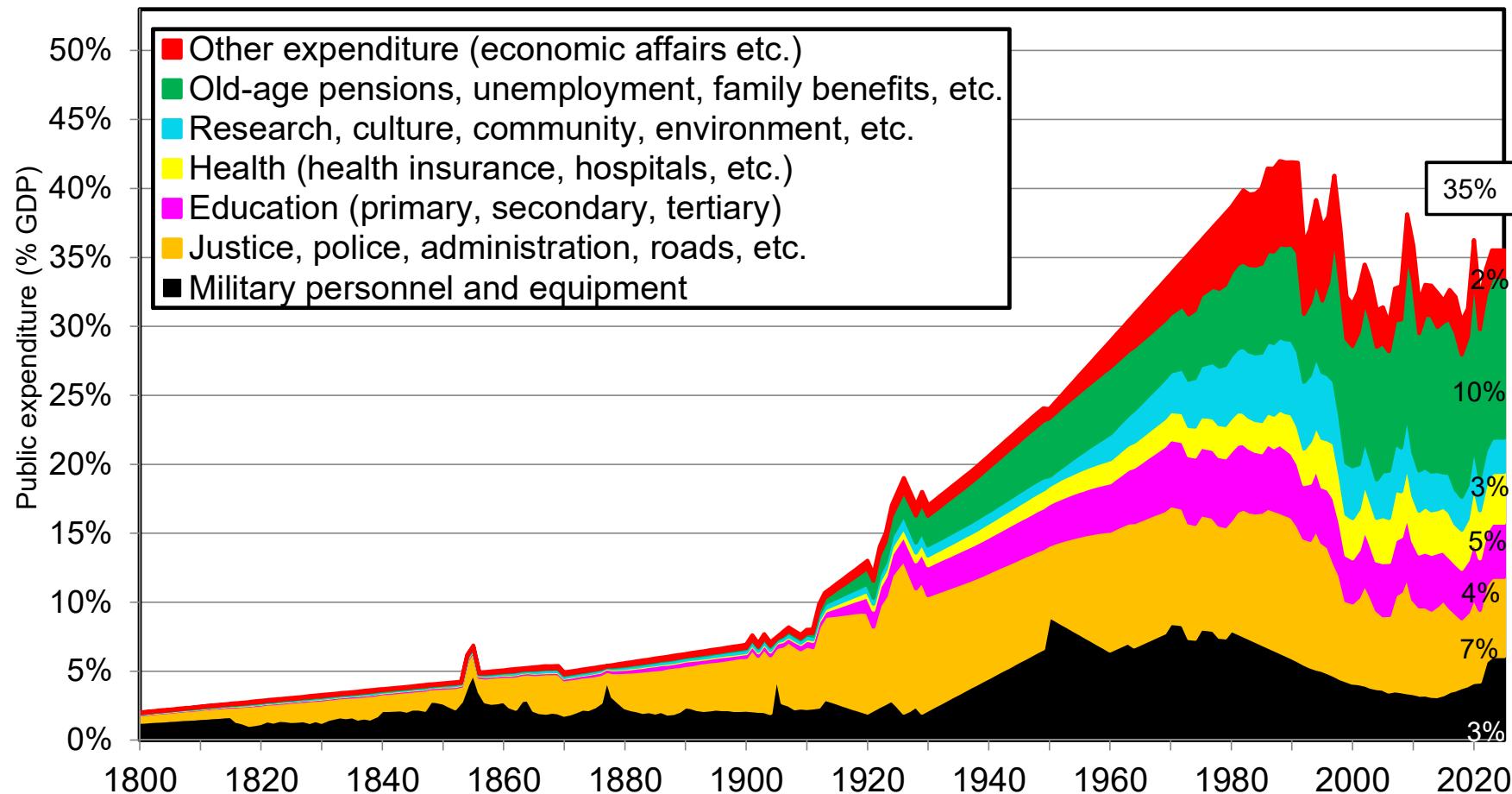
Interpretation. In 2025, total public expenditure amounts to about 26% of GDP in Middle East/North Africa, including about 3% for military expenditure, 6% for general public services (justice, police, general administration, roads, etc.), 4% for education, 3% for health, 2% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 5% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 3% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The (limited) rise of the social State: Subsaharan Africa



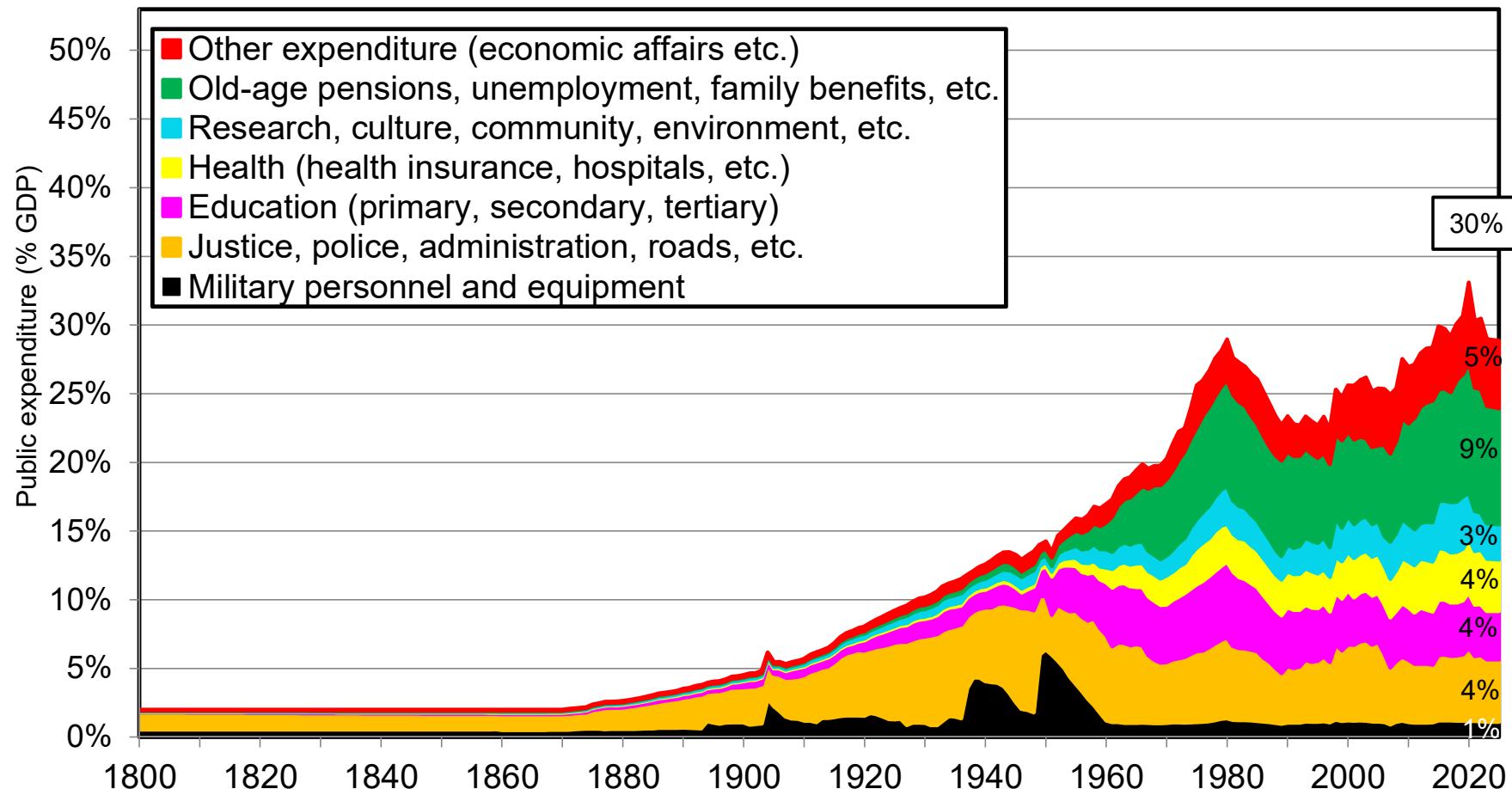
Interpretation. In 2025, total public expenditure amounts to about 17% of GDP in Subsaharan, including about 1% for military expenditure, 4% for general public services (justice, police, general administration, roads, etc.), 4% for education, 2% for health, 2% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 2% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 2% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: Russia/Central Asia



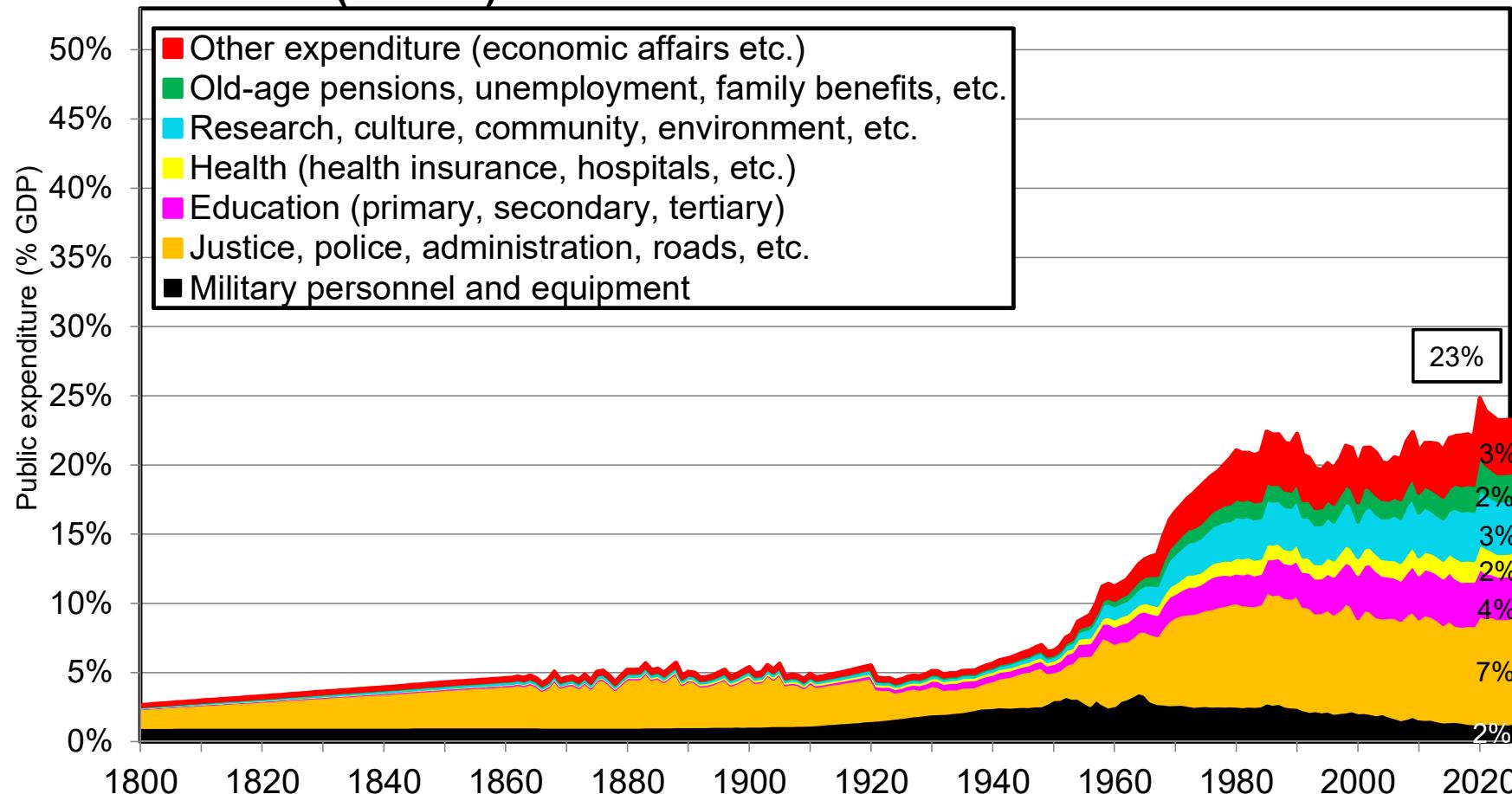
Interpretation. In 2025, total public expenditure amounts to about 35% of GDP in Russia/Central Asia, including about 3% for military expenditure, 7% for general public services (justice, police, general administration, roads, etc.), 4% for education, 5% for health, 3% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 10% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 2% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

The rise of the social State: East Asia

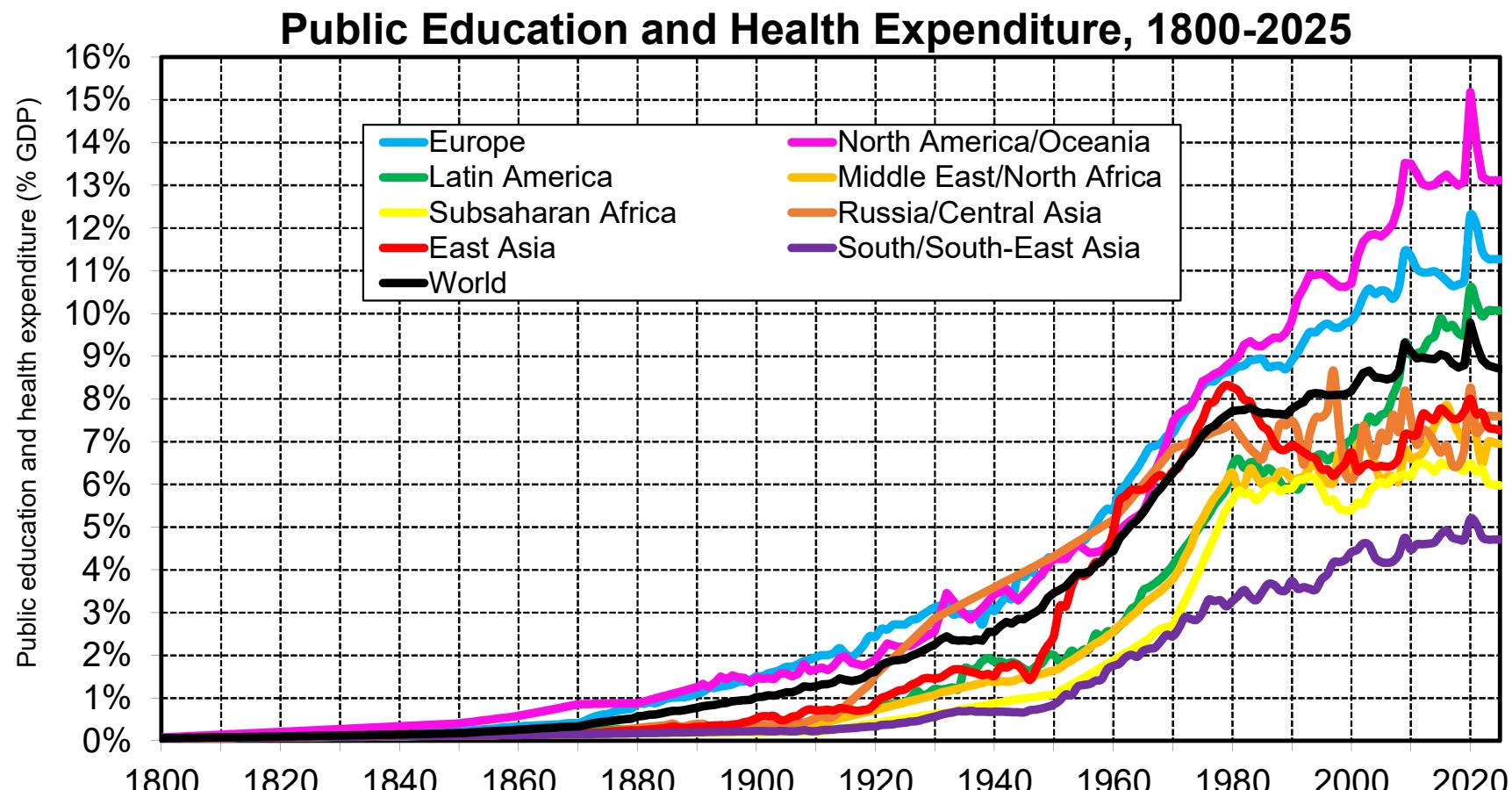


Interpretation. In 2025, total public expenditure amounts to about 30% of GDP in East Asia, including about 1% for military expenditure, 4% for general public services (justice, police, general administration, roads, etc.), 4% for education, 4% for health, 3% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 9% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 5% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world

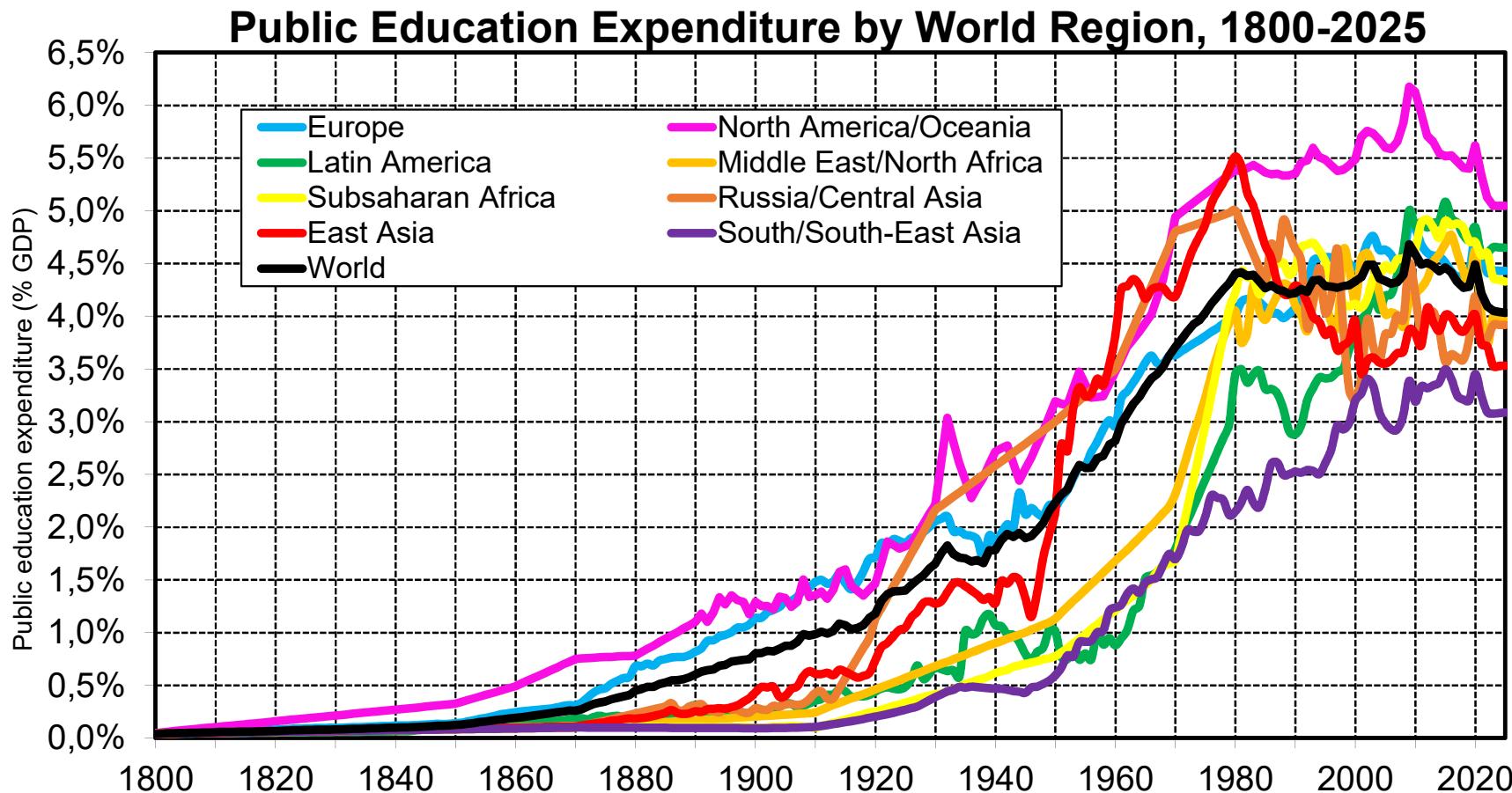
The (limited) rise of the social State: South/South-East Asia



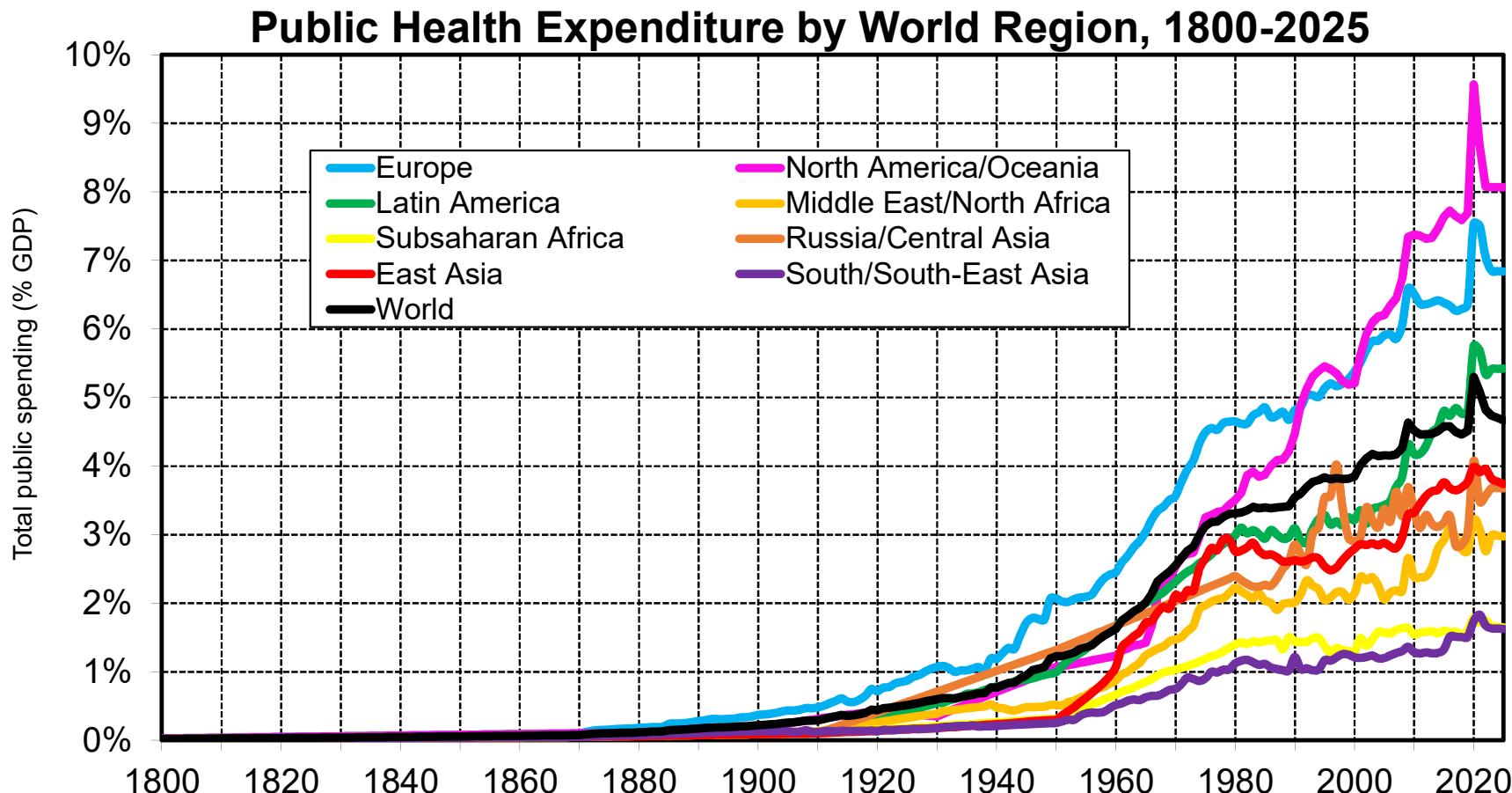
Interpretation. In 2025, total public expenditure amounts to about 23% of GDP in South & South-East Asia, including about 2% for military expenditure, 7% for general public services (justice, police, general administration, roads, etc.), 4% for education, 2% for health, 3% for research, culture/recreation/religion, community services (water, light, etc.), environmental protection (waste, biodiversity, etc.), 2% for social protection (old-age pensions, unemployment, family benefits, maternity, sick-leave, safety nets, etc.) and 3% for other expenditures (economic affairs excluding roads and basic infrastructures included in general public services). **Sources and series:** wid.world



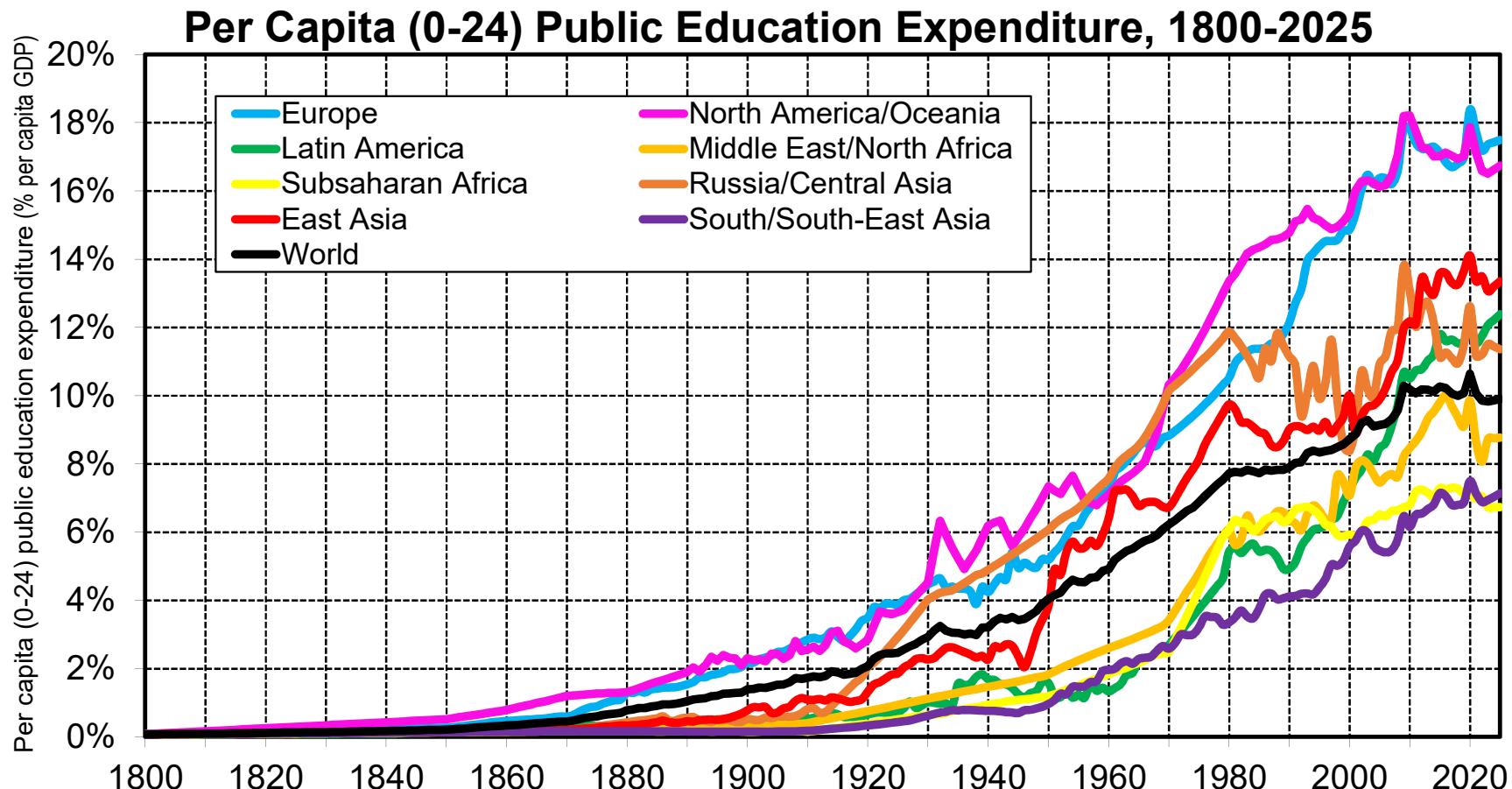
Interpretation. Public education and health expenditure rose from less than 1% of GDP before 1900 to about 9% of GDP in 2025 at the global level, with large regional variations (from about 5-6% of GDP in South & South East Asia and Subsaharan Africa to 11-14% of GDP in Europe and North America/Oceania). **Sources and series:** wid.world



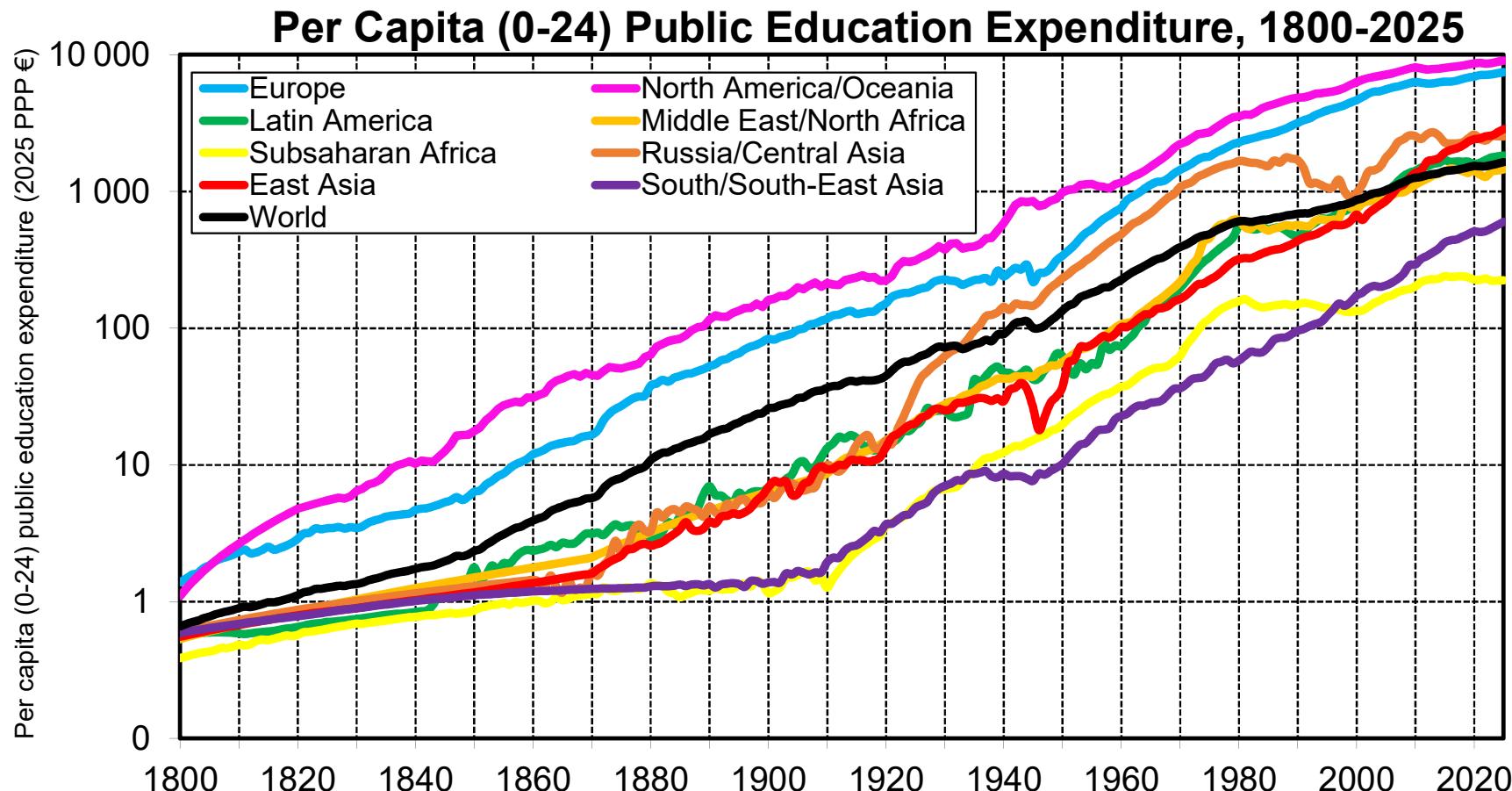
Interpretation. Public education expenditure rose from less 1% of GDP before 1900 to about 4-4.5% of GDP at the global level in 2025, with surprisingly similar levels in many world regions, including Europe and Subsaharan Africa. However the share of school-age population in total population varies widely across regions (e.g. it is more than 2.5 times as large in SSAF than in Europe). It is therefore critical to look at age-corrected education expenditures in order to make meaningful comparisons. **Sources and series:** wid.world



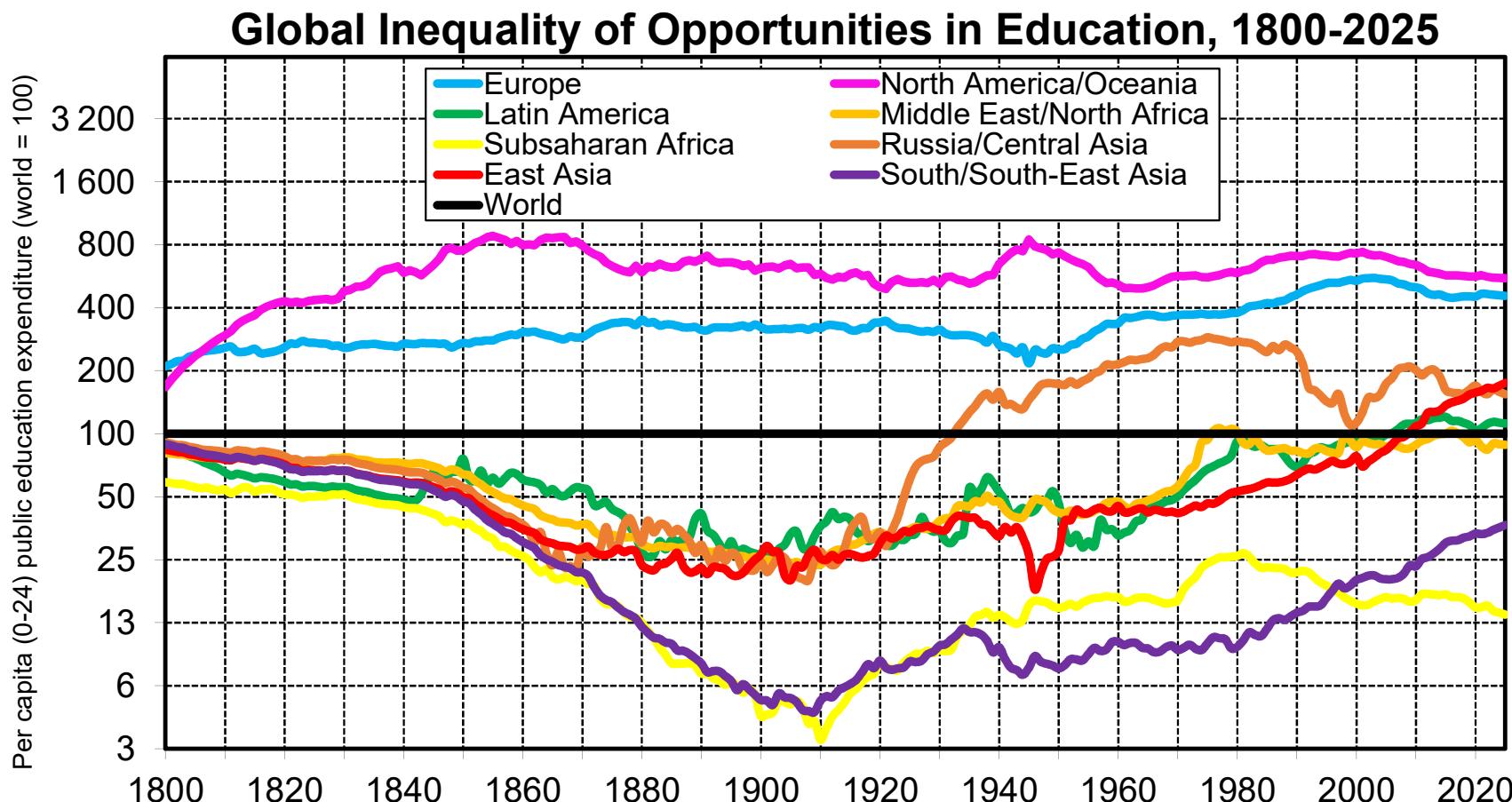
Interpretation. Public health expenditure was less than 0.5% before 1900 and is about 5% of GDP in 2025, with enormous variations across world regions, from 1-2% of GDP in South & South-East Asia and Subsaharan Africa to 7-8% of GDP in Europe and North America/Oceania. These very large gaps are partly due to different age structures (with a much larger old-age population share in richer countries). Like for education, one needs to analyze age-corrected health expenditure in order to make proper comparisons. **Sources and series:** wid.world



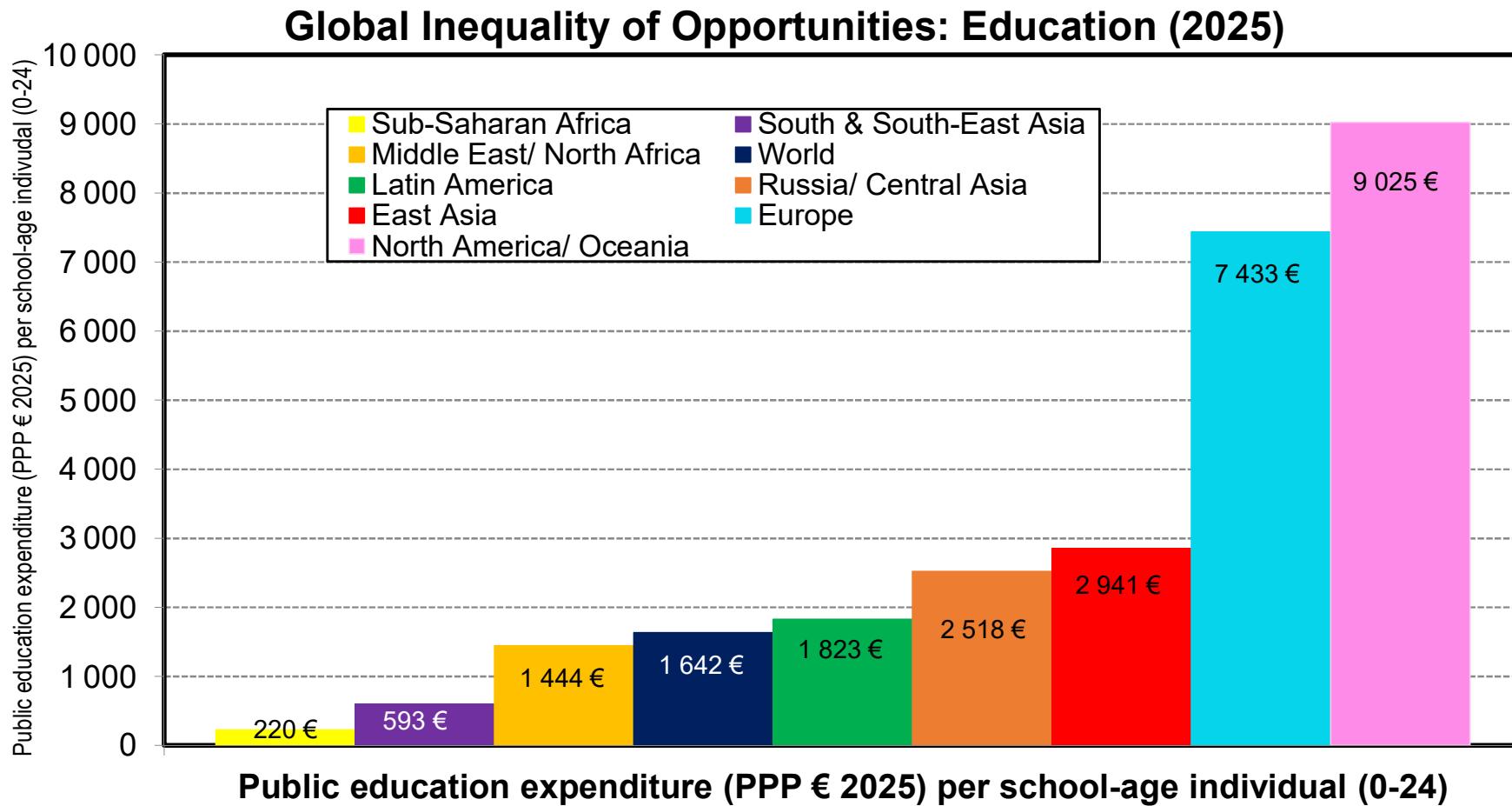
Interpretation. Average public education expenditure per school-age individual (0-to-24-year-old) has increased from less 1% of per capita GDP in 1800 to 10% in 2025, with large variations across regions (from about 7% in Subsaharan Africa to 17-18% in Europe and North America/Oceania). **Sources and series:** wid.world



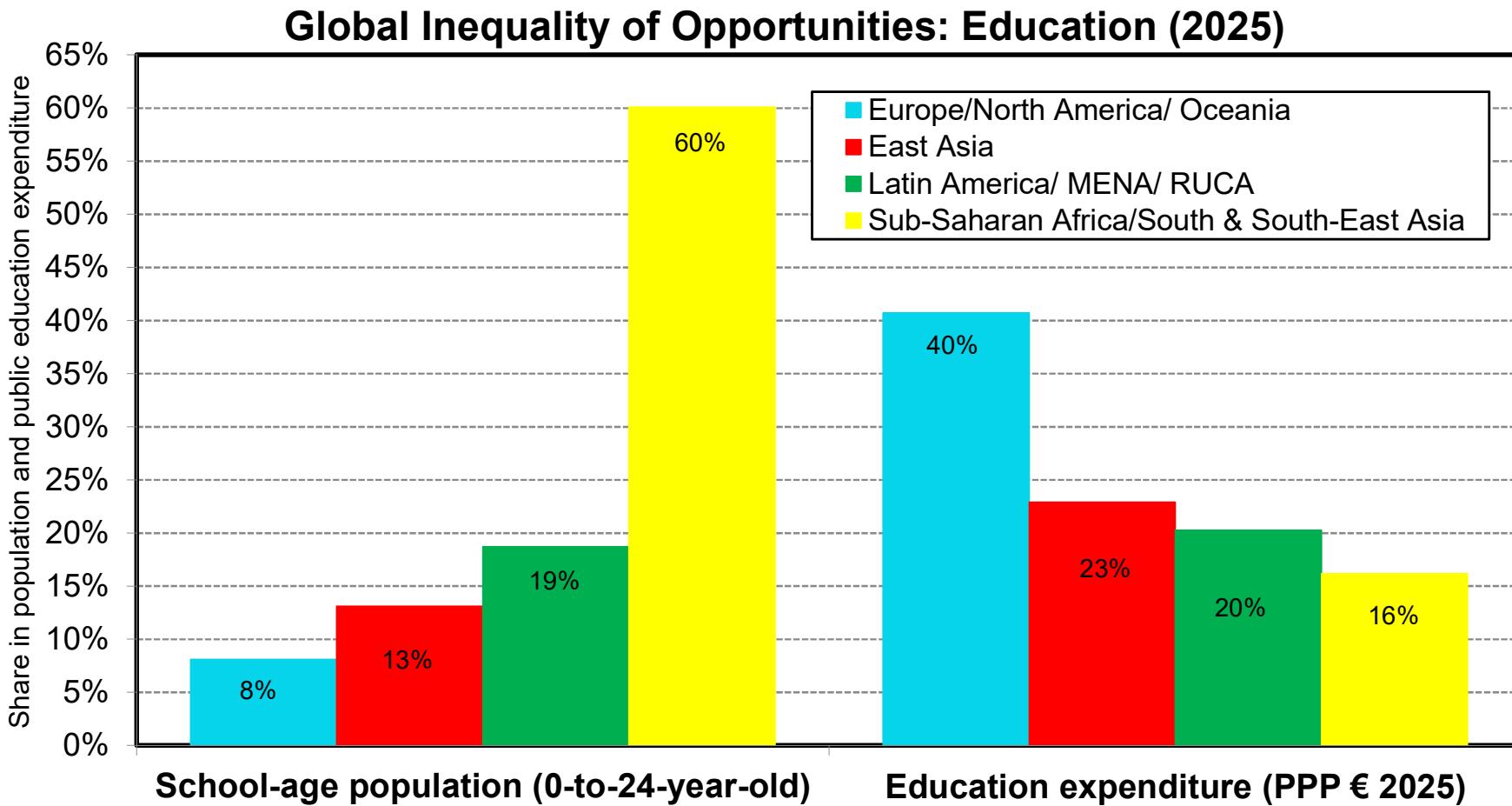
Interpretation. Expressed in 2025 PPP €, average public education expenditure per school-age individual (0-to-24-year-old) has increased from less than 1€ in 1800 to about 1700€ in 2025, with enormous variations across regions (from about 200€ in Subsaharan Africa to about 8000-9000€ in Europe and North America/Oceania, with a world average of 1660€). **Sources and series:** see [wid.world](#)



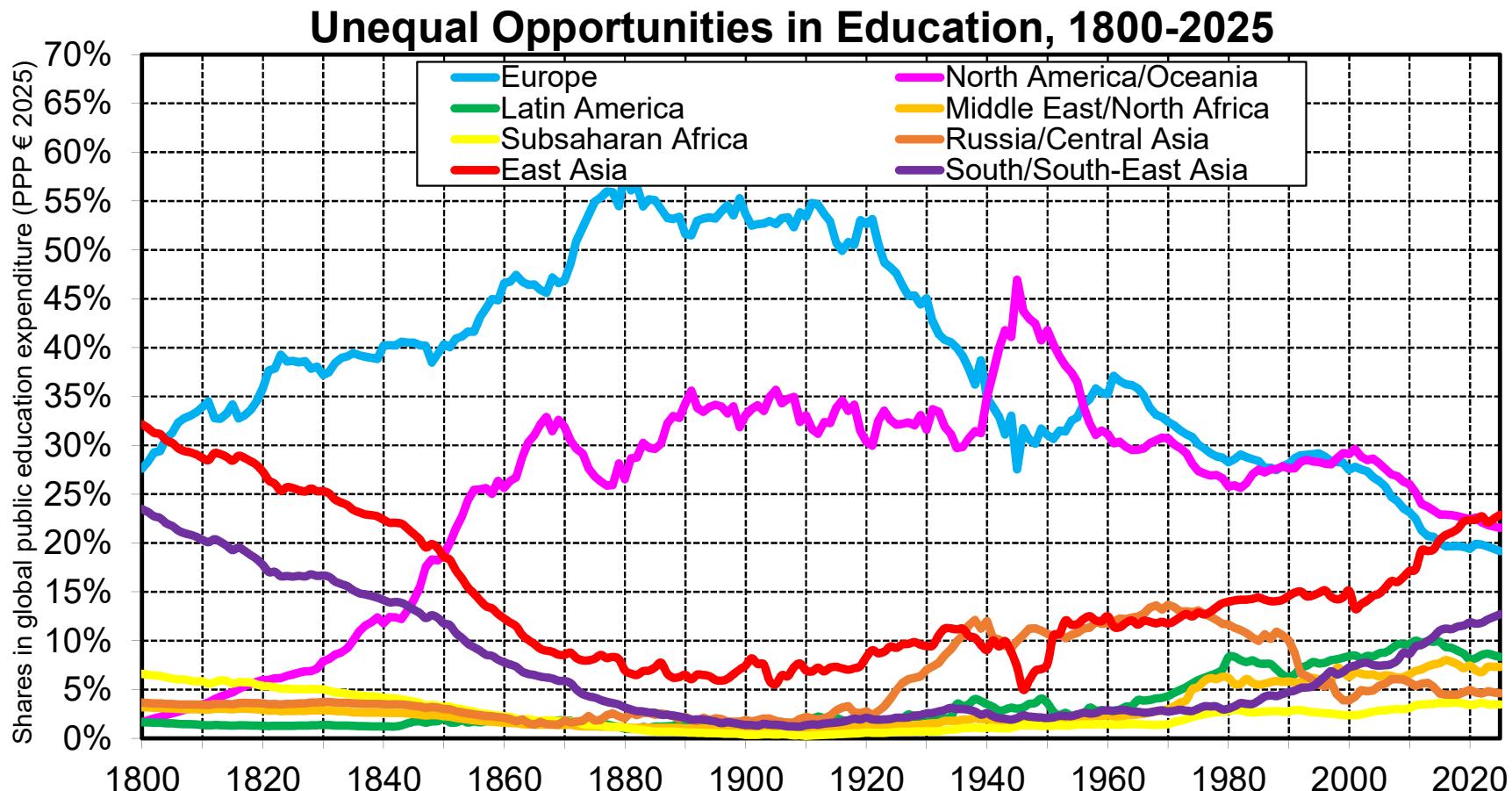
Interpretation. Expressed in PPP terms, average public education expenditure per school-age individual (0-to-24-year-old) has always been a lot larger in rich countries than in poor countries. In 2025, it is equal to 13% of world average in Subsaharan Africa, 455% of world average in Europe and 550% in North America/Oceania, i.e. a scale of 1 to about 30-50. **Sources and series:** see [wid.world](#)



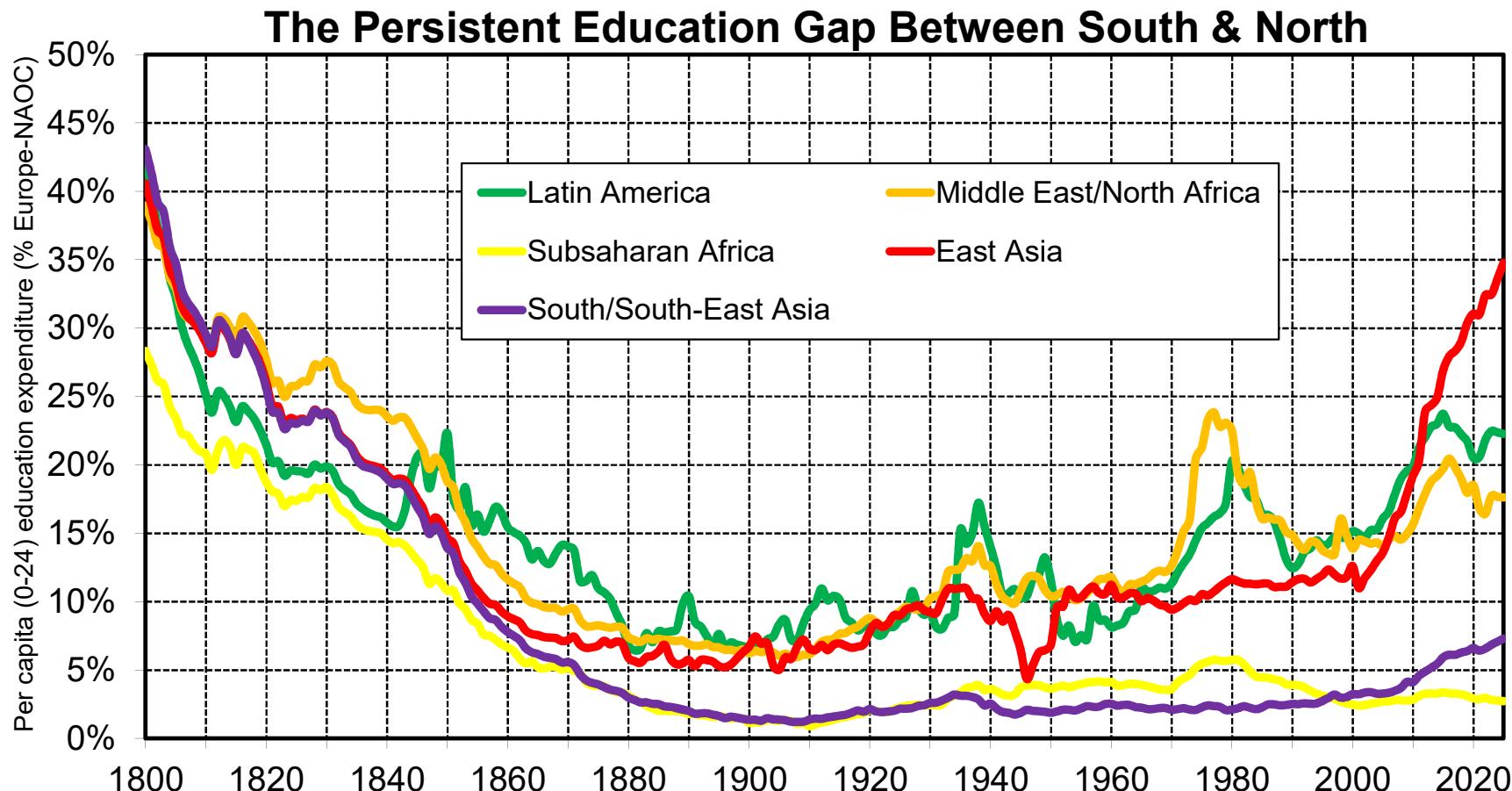
Interpretation. In 2025, average public education expenditure per school-age individual (0-to-24-year-old) varies enormously across world regions, from 220€ in Subsaharan Africa to 9025€ in North America/Oceania (PPP € 2025), i.e. a gap of almost 1 to 50. If we were using MERs (market exchange rates) rather than PPPs (purchasing power parities), the gaps would be 2-3 times larger. **Sources & series:** wid.world



Interpretation. In 2025, Europe and North America/Oceania host 8% of the world school-age population (0-to-24-year-old) and benefit from 40% of the world public education expenditure (measured in PPP € 2025). In contrast, Subsaharan Africa and South & South-East Asia host 60% of the global school-age population and benefit from 16% of the global education expenditure. **Sources & series:** wid.world

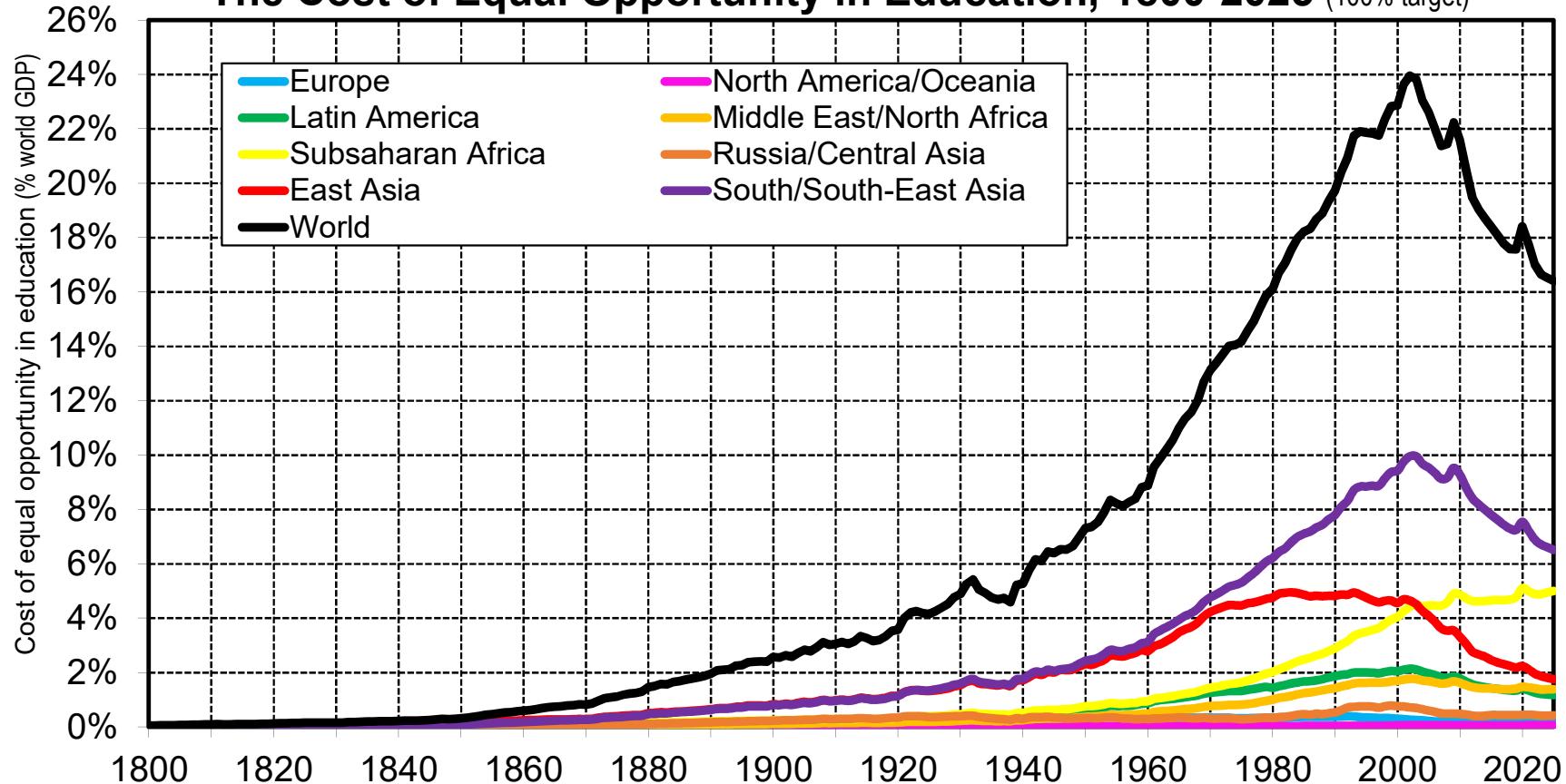


Interpretation. The share of Subsaharan Africa in global public education expenditure (PPP € 2025) did increase a little bit in recent decades (from less than 2% in 1970 to 3% in 1990 and 4% in 2025) but has remained extremely small as compared to its share in school-age population. **Sources and series:** wid.world

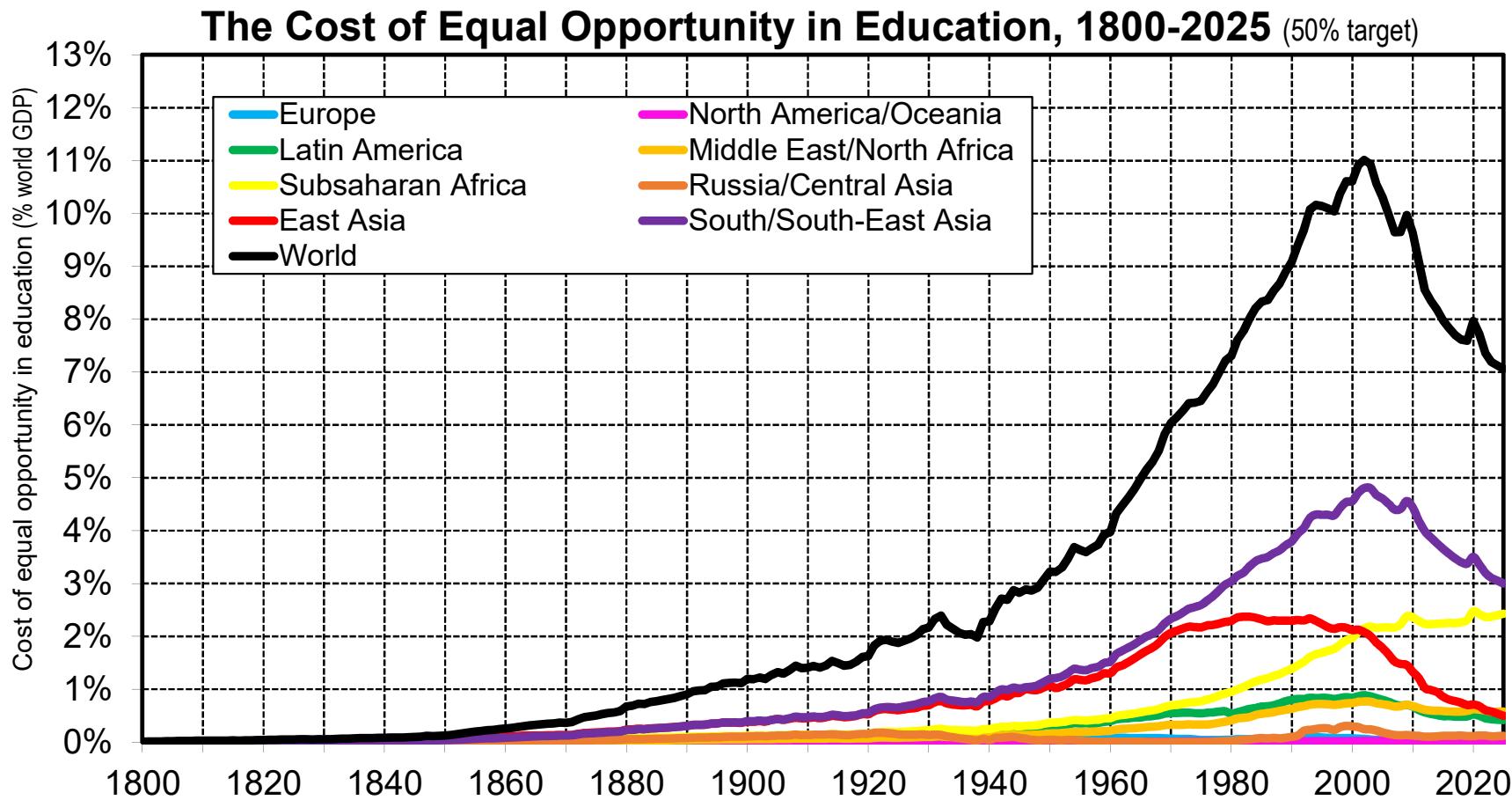


Interpretation. Except in early 19th century (when education expenditure was very small everywhere), average public education expenditure per school-age individual (0-to-24-year-old) has always been much smaller in most world regions as compared to Europe/North America Oceania average (PPP). The situation improved in East Asia in recent decades, but the gap remains very large for Subsaharan Africa (with average expenditure equal to 3% of Europe/NAOC average in 2025) and South/South-East Asia (7%). **Sources and series:** wid.world

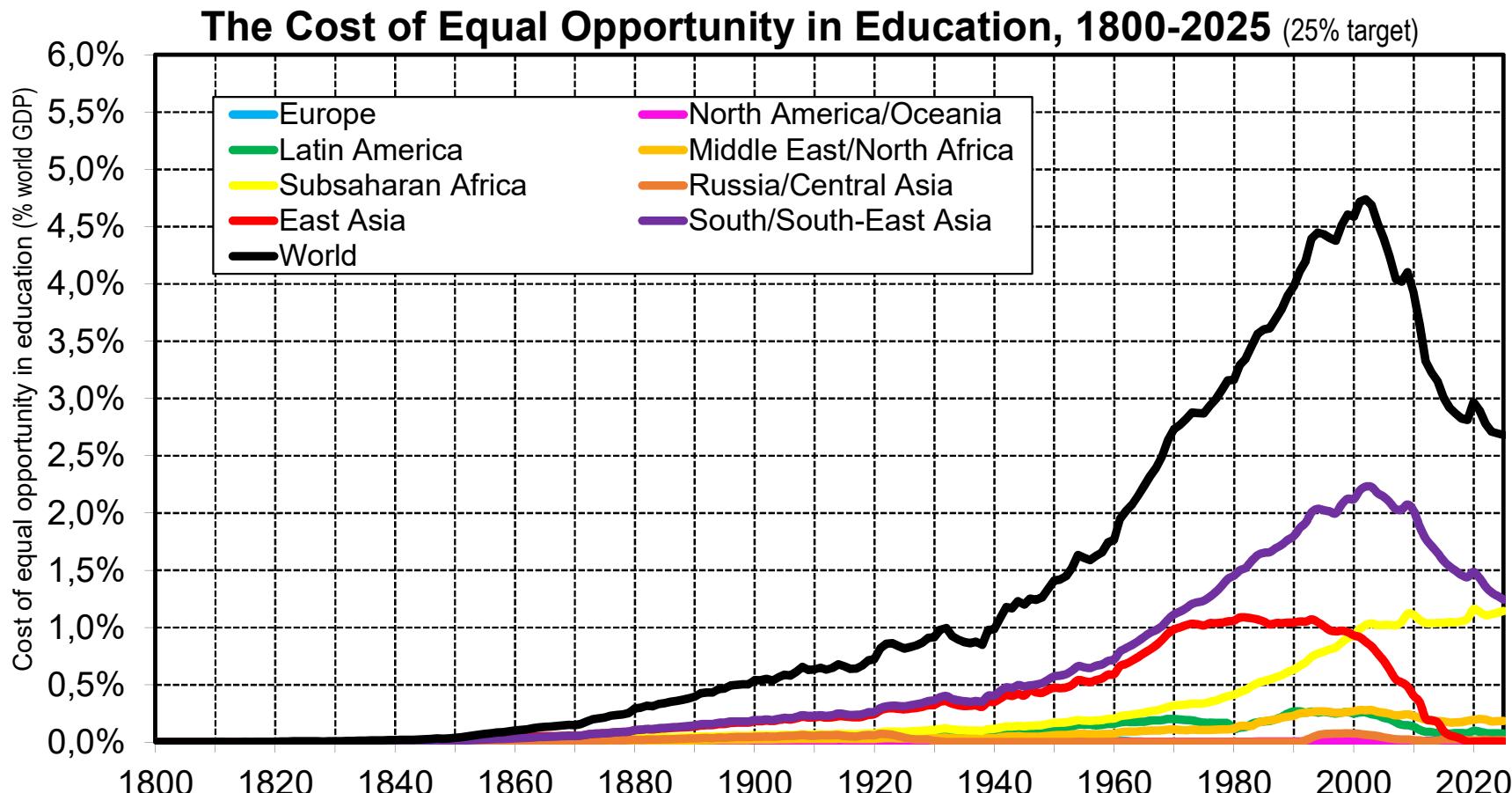
The Cost of Equal Opportunity in Education, 1800-2025 (100% target)



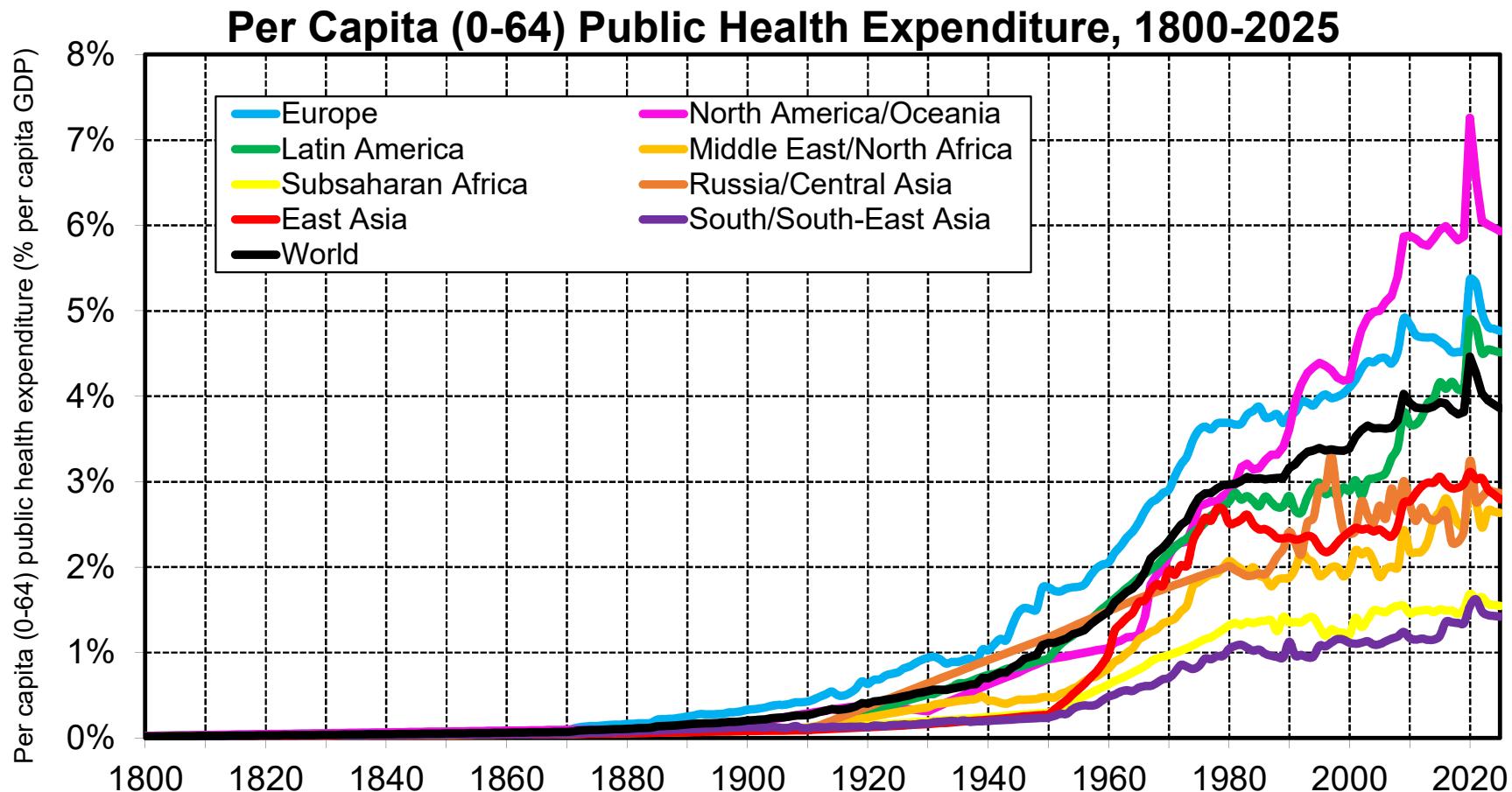
Interpretation. Assume that we raise average education expenditure per school-age individual (0-24) to the same level as Europe/NAOC average (in PPP terms) in all countries where it is lower. In 2025, the cost would be 16% of world GDP, including 7% for South & South-East Asia and 5% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as education expenditure was relatively lower at the time) and might have allowed for faster productivity convergence. **Sources and series:** wid.world



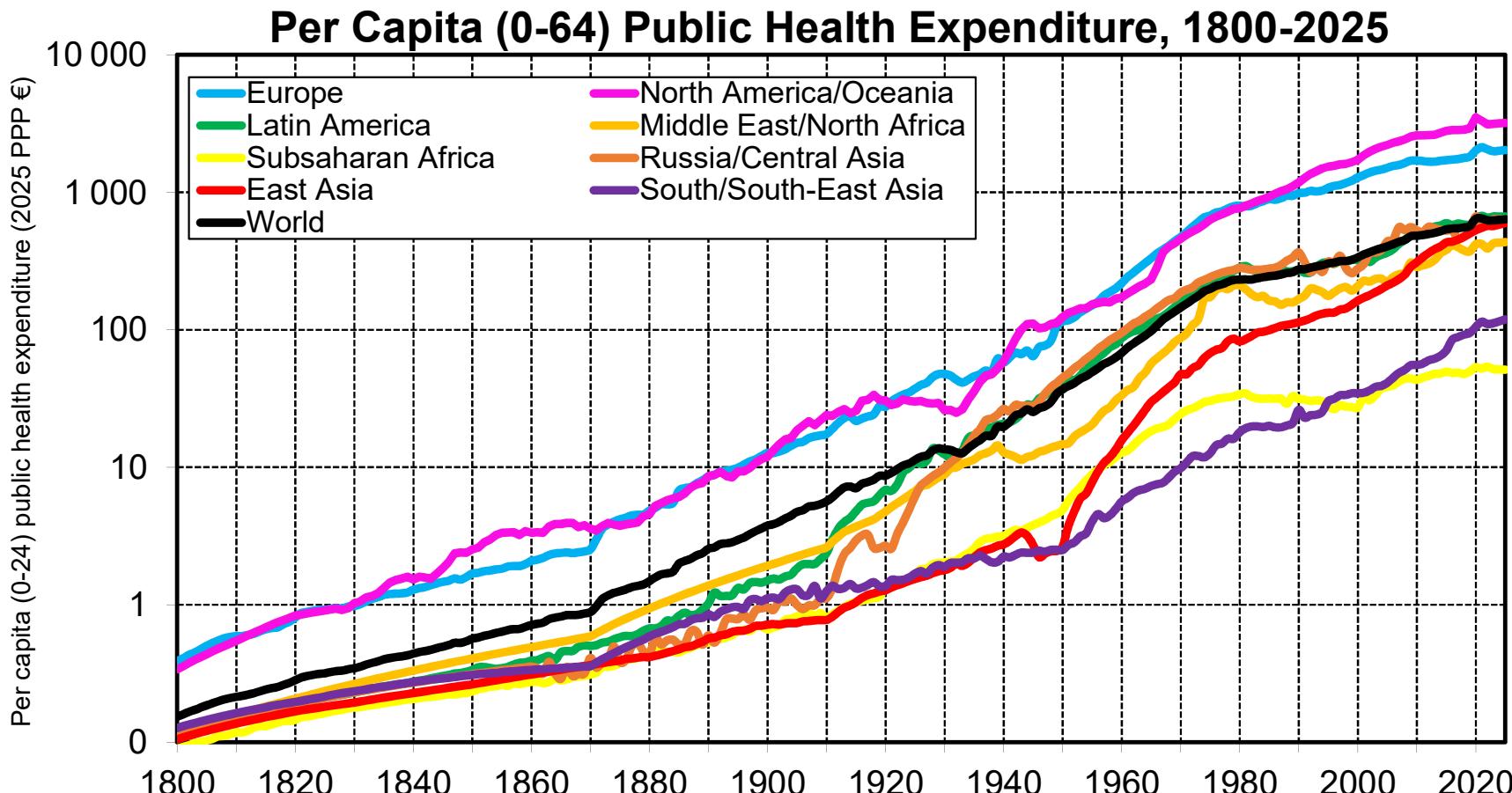
Interpretation. Assume that we raise average education expenditure per school-age individual (0-24) to 50% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 7% of world GDP, including about 3% for South & South-East Asia and 2.5% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as education expenditure was relatively lower at the time). **Sources and series:** wid.world



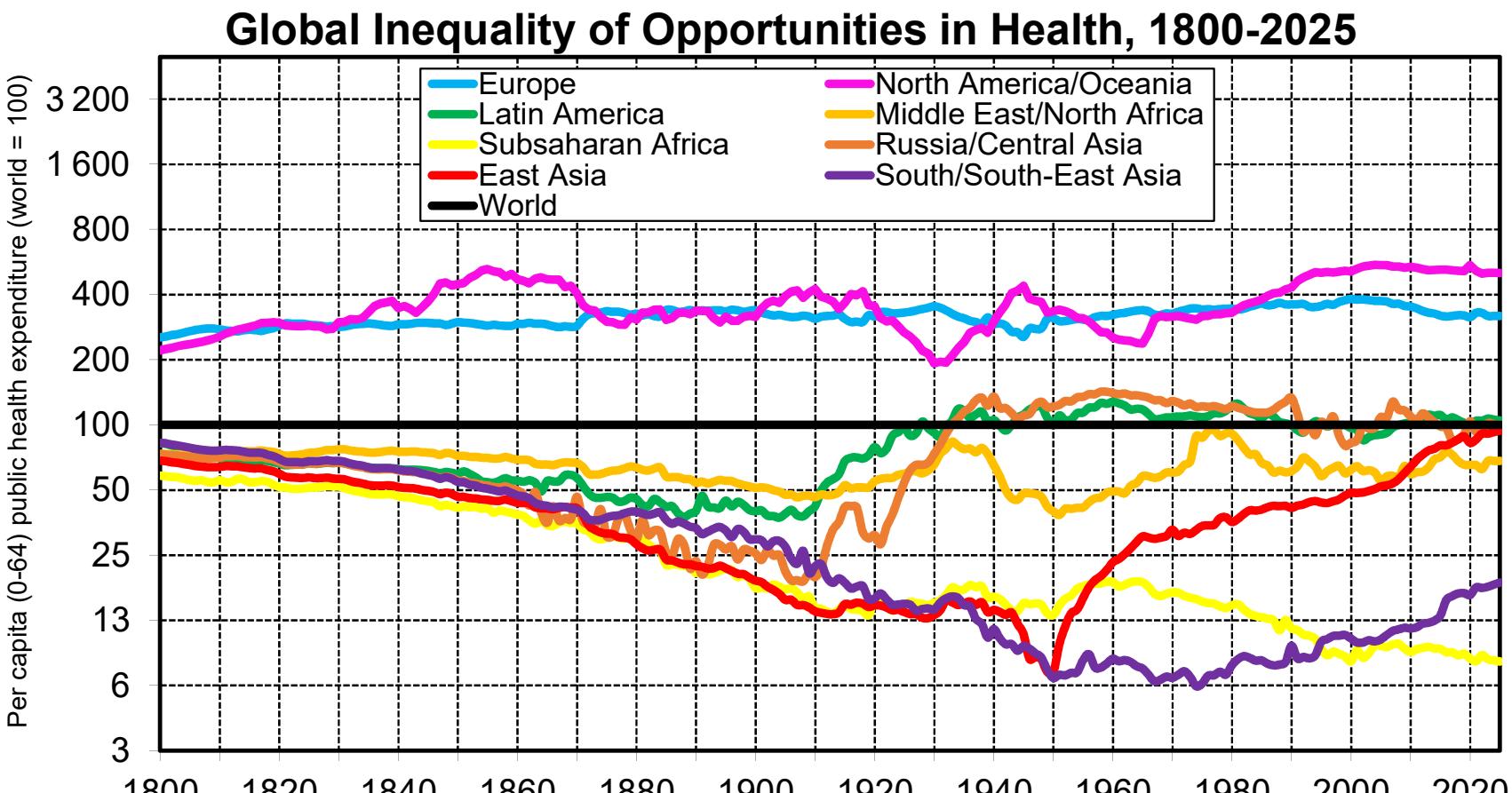
Interpretation. Assume that we raise average education expenditure per school-age individual (0-24) to 25% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 2.5-3% of world GDP, including about 1-1.5% for South & South-East Asia and 1-1.5% for Subsaharan Africa. The cost is high but more realistic than full equality of opportunity, and it would already allow for very substantial acceleration in productivity convergence in the coming decades. **Sources and series:** wid.world



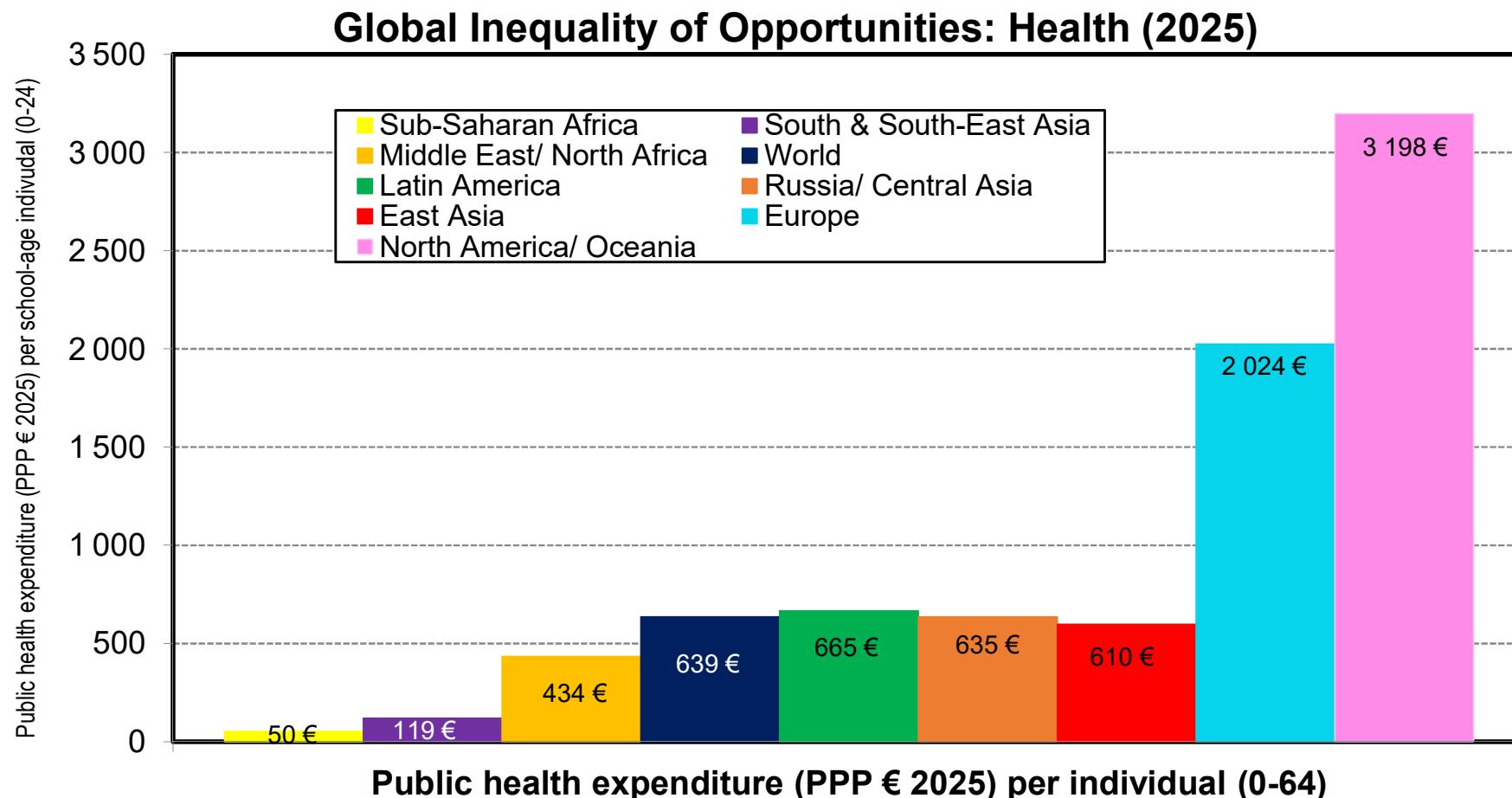
Interpretation. Assuming that individuals aged 65-year-old and over receive on average 3 times more per capita health expenditure as individuals aged 0-to-64 (which is what we observe on average in recent decades), we can estimate that average per capita public health expenditure received by 0-to-64-year-old individuals is equal to about 4% of per capita GDP at the world level in 2025, with large variations between regions (from 1-2% in the poorest regions to 5-6% in the richest regions). **Sources and series:** wid.world



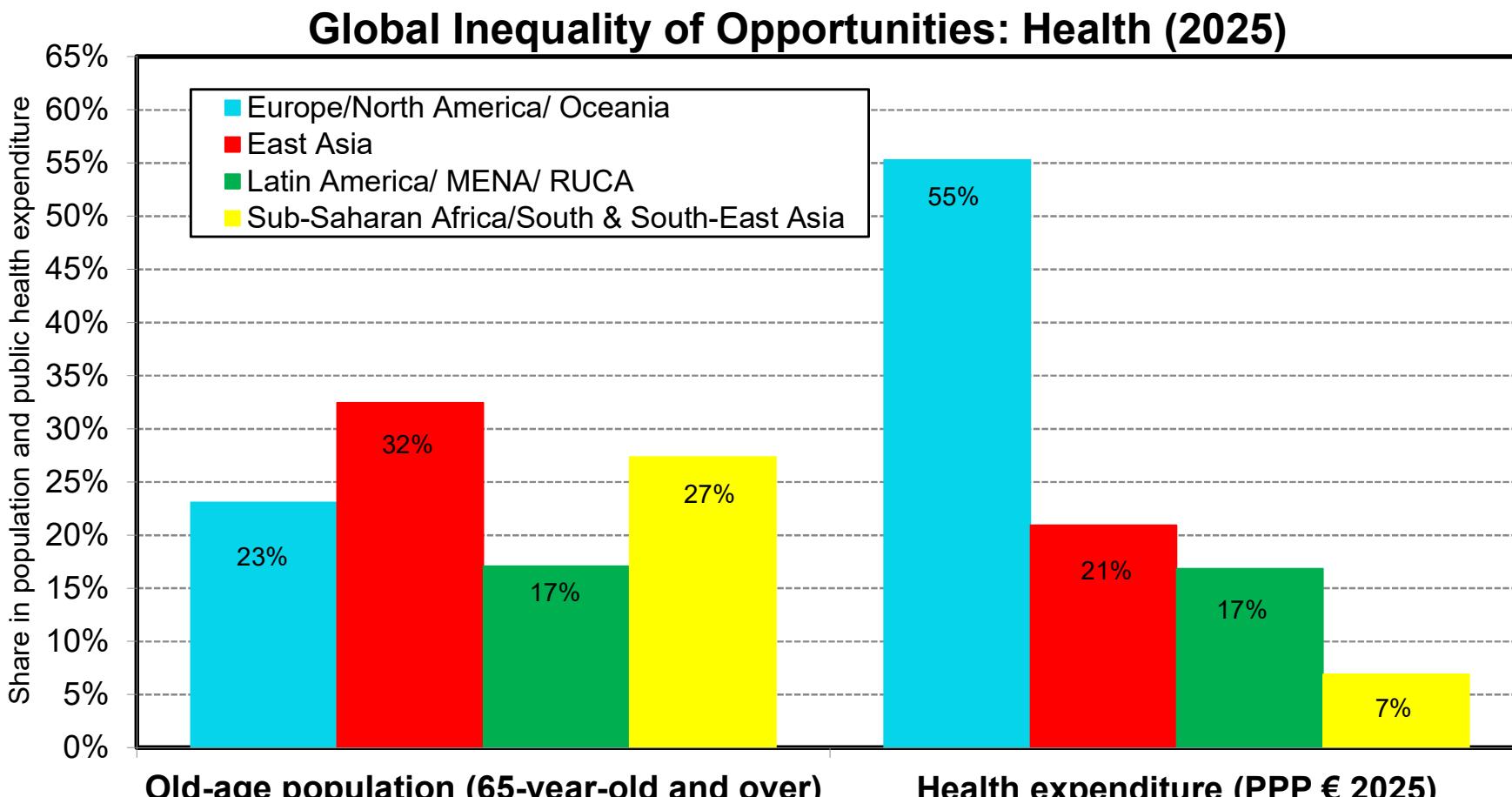
Interpretation. Expressed in 2025 PPP €, average public health expenditure per capita (0-to-64-year-old) (assuming older individuals receive 3 times this level) has increased from less than 1€ in 1800 to about 630€ in 2025, with enormous variations across regions (from 50€ in Subsaharan Africa from 2000€ in Europe to 3200€ in North America/Oceania). **Sources and series:** see [wid.world](#)



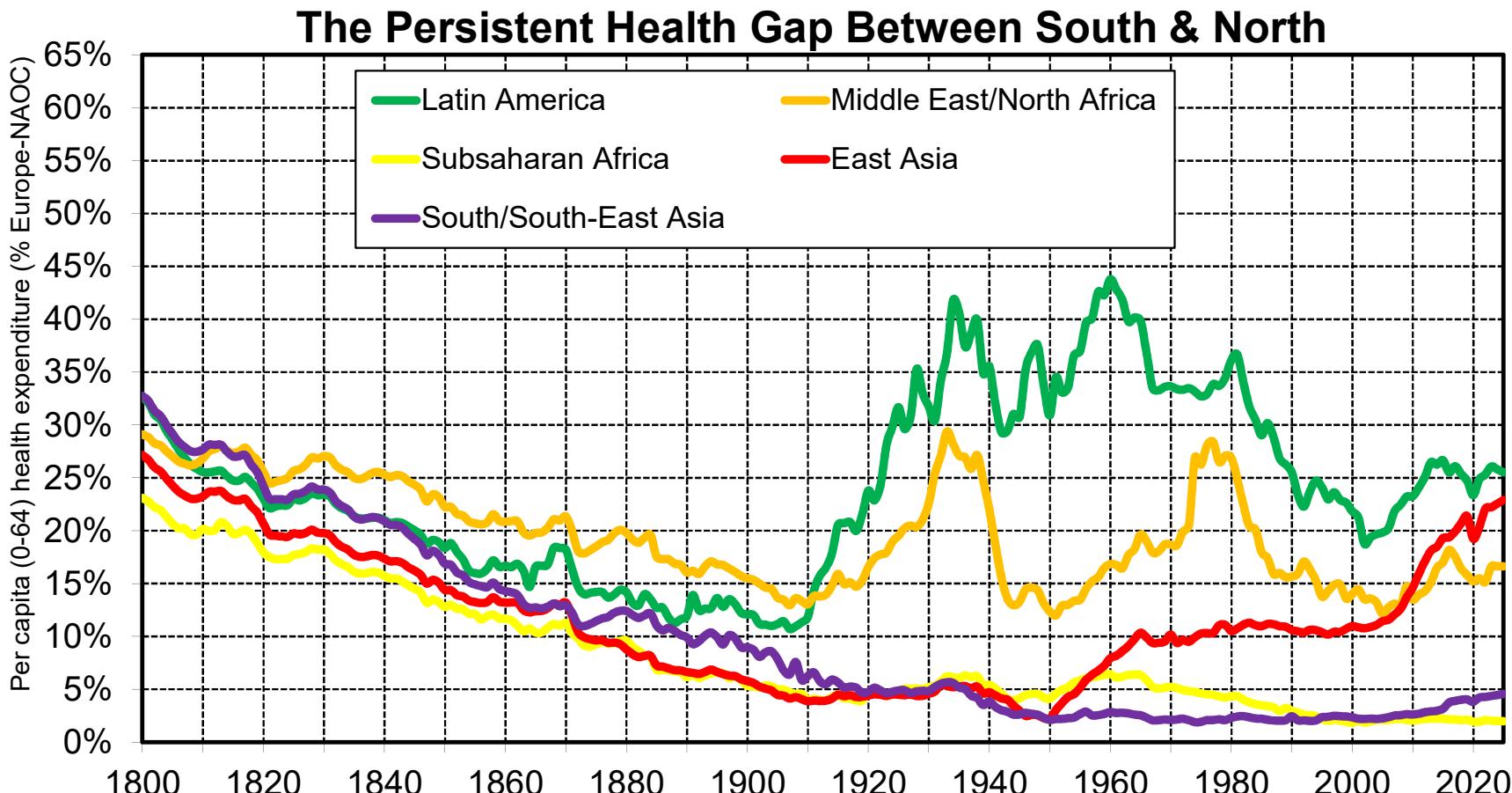
Interpretation. Expressed in PPP terms, average public health expenditure per capita (0-to-64-year-old) (assuming older individuals receive 3 times this level) has always been a lot larger in rich countries than in poor countries. In 2025, it is equal to 8% of world average in Subsaharan Africa, 18% in South & South-East Asia, 317% of world average in Europe and 502% in North America/Oceania, i.e. a scale of 1 to about 40-50. **Sources and series:** see [wid.world](#)



Interpretation. In 2025, average public health expenditure per individual aged 0-to-64-year-old (assuming that older individuals receive 3 times this amount) varies enormously across world regions, from 50€ in Subsaharan Africa to 3 198€ in North America/Oceania (PPP € 2025), i.e. a gap of about 1 to 60. If we were using MERs (market exchange rates) rather than PPPs (purchasing power parities), the gaps would be 2-3 times larger. The gaps would also be also larger in the absence of an age correction. **Sources & series:** wid.world

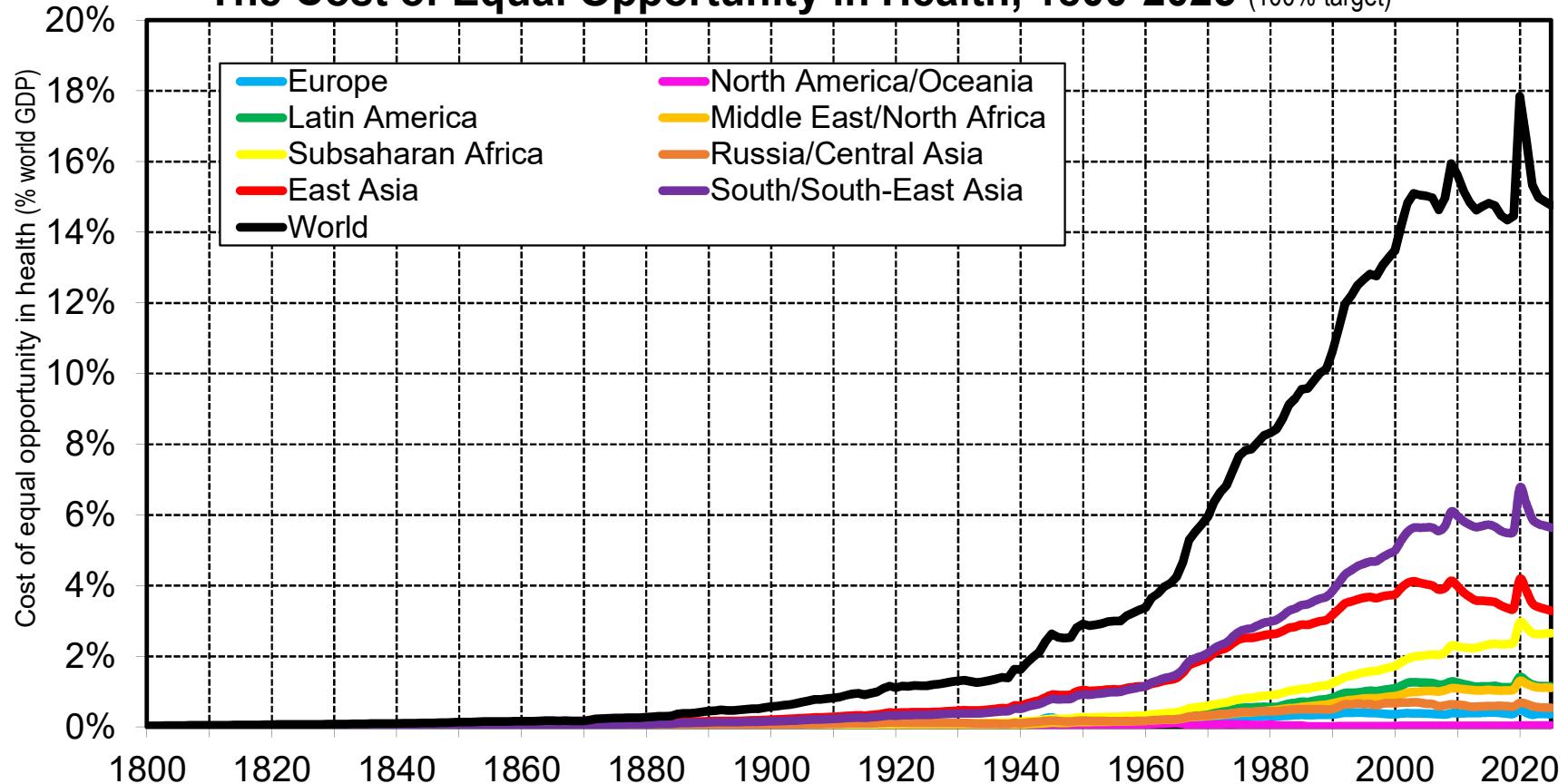


Interpretation. In 2025, Europe and North America/Oceania host 23% of the world old-age population (65-year-old +) and benefit from 55% of the world public health expenditure (measured in PPP € 2025). In contrast, Subsaharan Africa and South & South-East Asia host 27% of the global old-age population and benefit from 7% of the global health expenditure. **Sources & series:** wid.world

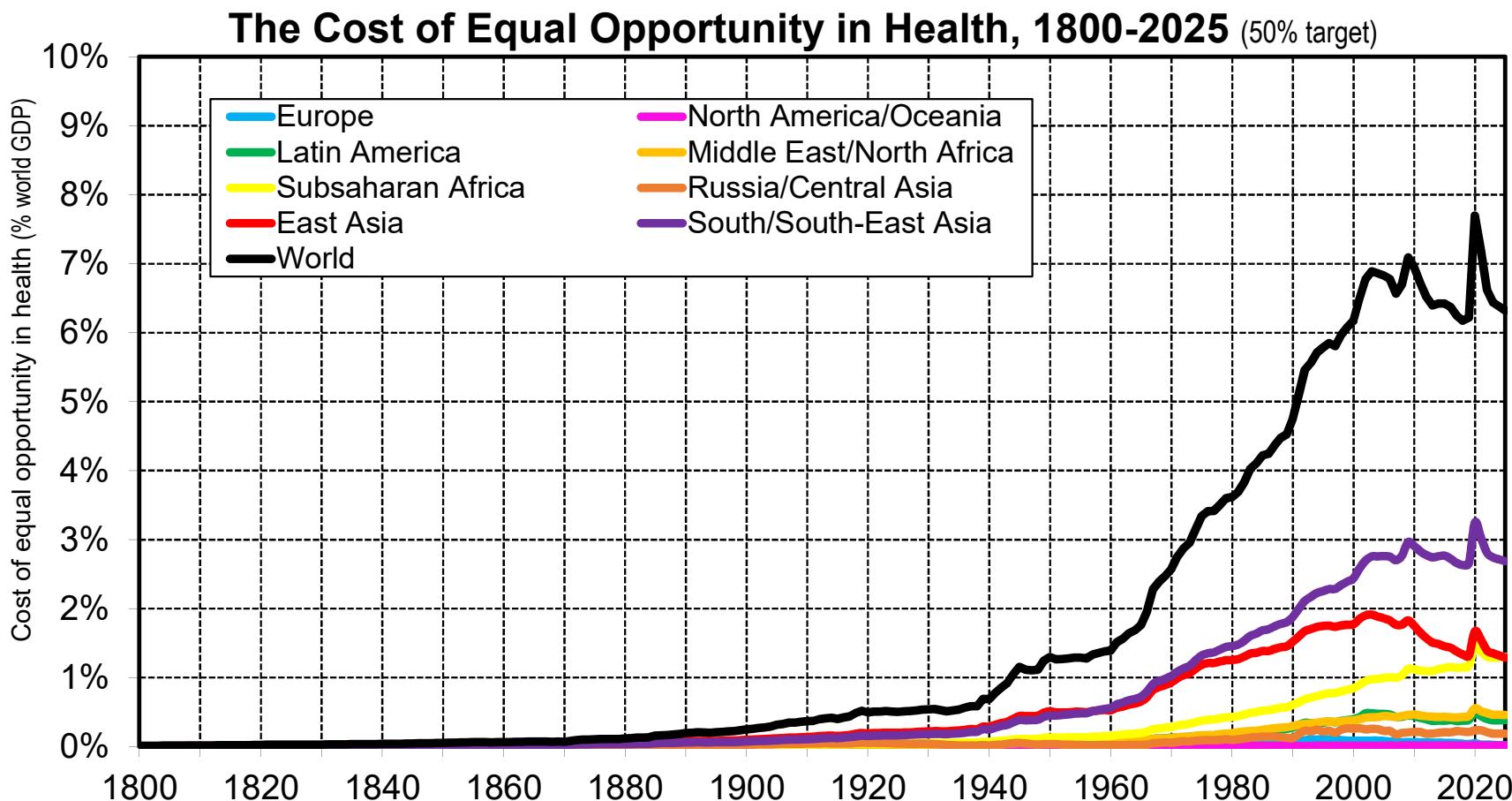


Interpretation. Average public health expenditure per capita (0-to-64-year-old) (assuming older individuals receive 3 times this level) has always been much smaller in most world regions as compared to the Europe/North America/Oceania average (PPP). The situation has improved in East Asia in recent decades (and the gap has always been smaller in Latin America and MENA), but the gap remains enormous for Subsaharan Africa (2% of Europe-NAOC average in 2025) and South/South-East Asia (5%). **Sources and series:** wid.world

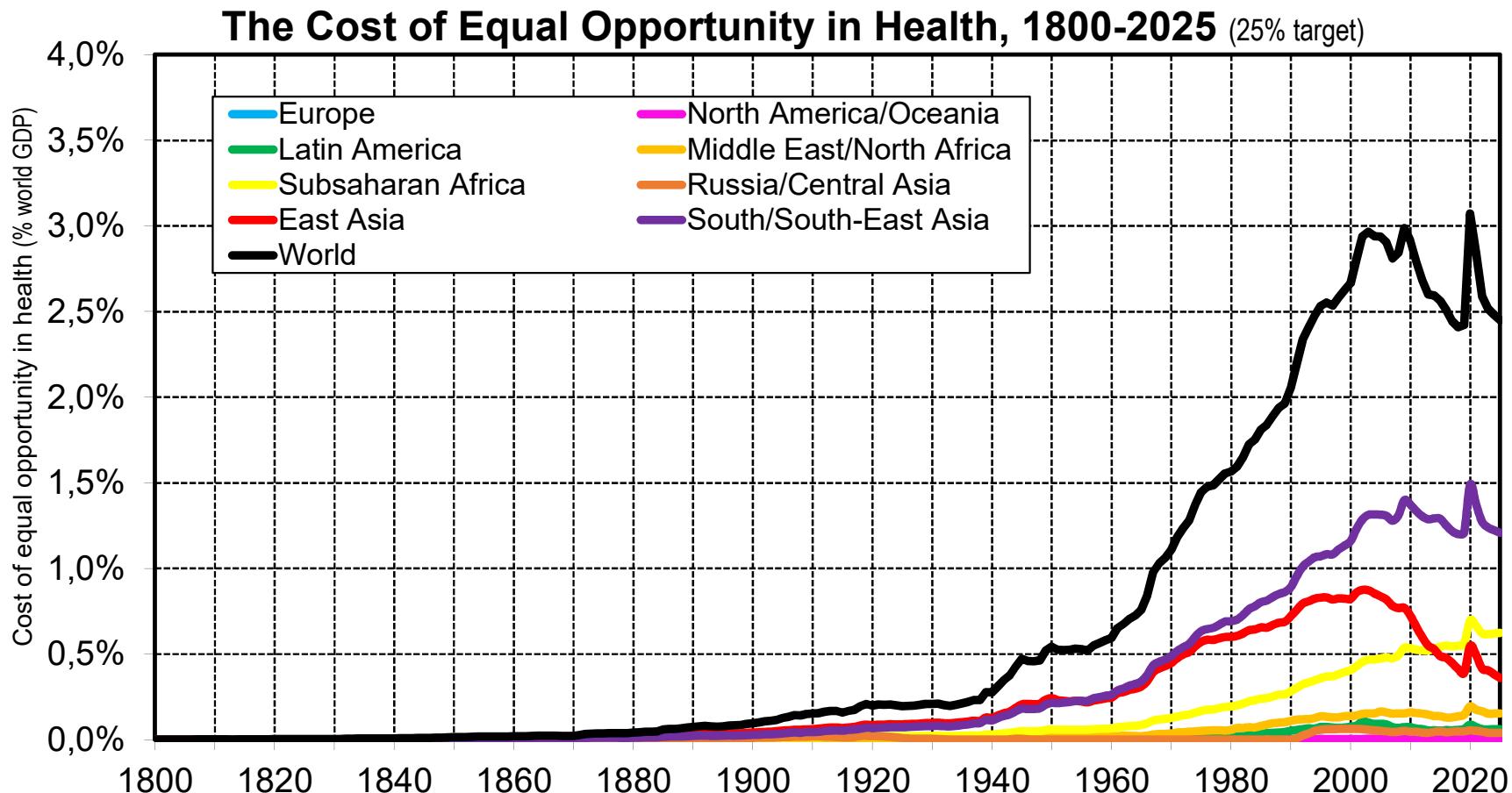
The Cost of Equal Opportunity in Health, 1800-2025 (100% target)



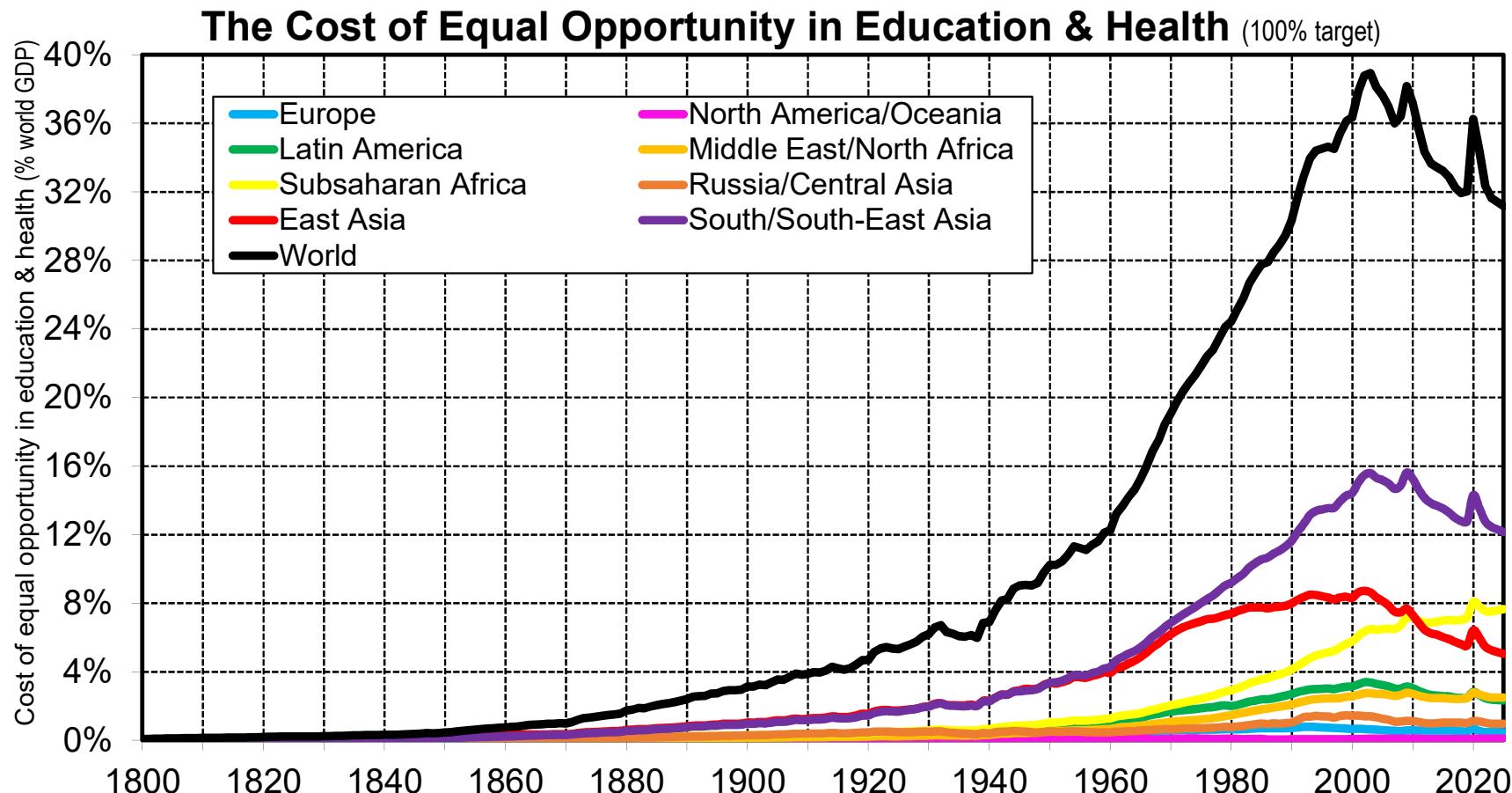
Interpretation. Assume that we raise average health expenditure per capita (0-to-64-year-old) to the same level as Europe/NAOC average (in PPP terms) in all countries where it is lower. In 2025, the cost would be 15% of world GDP, including 6% for South & South-East Asia, 3% in East Asia and 3% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as health expenditure was relatively lower at the time). **Sources and series:** wid.world



Interpretation. Assume that we raise average health expenditure per capita (0-to-64-year-old) to 50% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 7% of world GDP, including 3% for South & South-East Asia, 1.5% in East Asia and 1.5% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as health expenditure was relatively lower at the time). **Sources and series:** wid.world

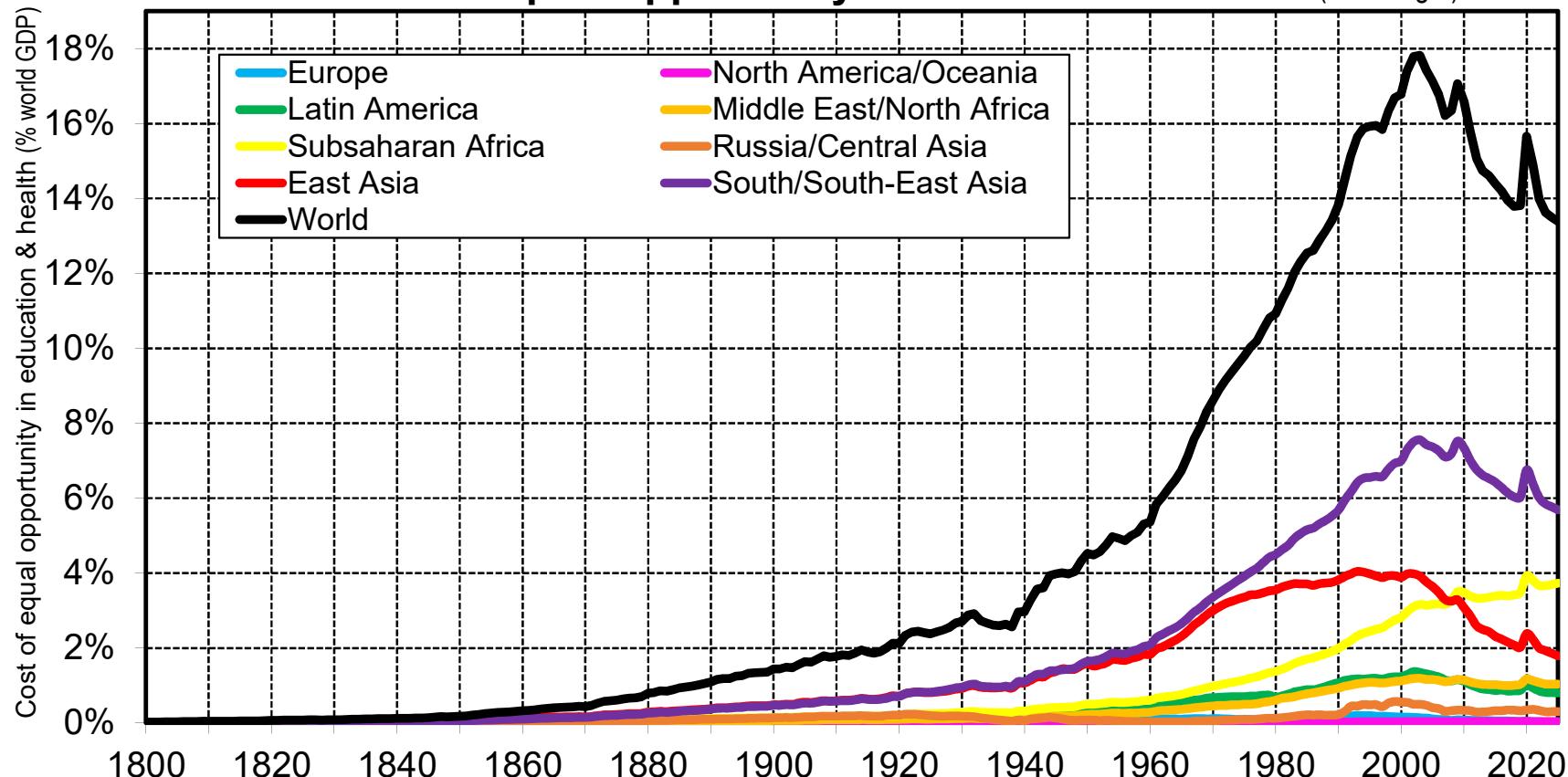


Interpretation. Assume that we raise average health expenditure per capita (0-64) to 25% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 2.5% of world GDP, including about 1-1.5% for South & South-East Asia and 0.5% for Subsaharan Africa. The cost is high but more realistic than full equality of opportunity, and it could contribute to an acceleration in productivity convergence in the coming decades. **Sources and series:** wid.world

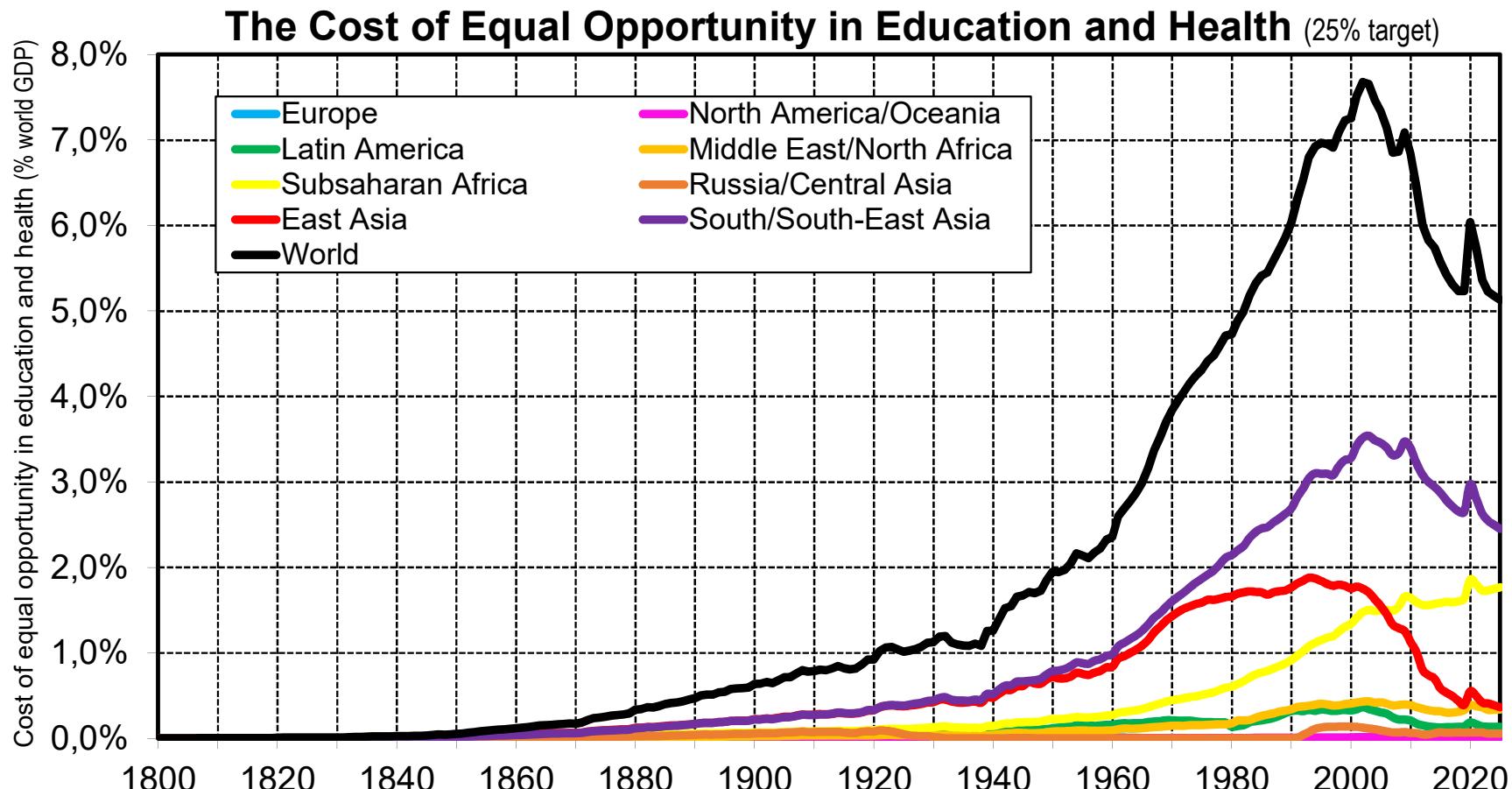


Interpretation. Assume that we raise per capita (age-adjusted) education and health expenditure to the same level as Europe/NAOC average (in PPP terms) in all countries where it is lower. In 2025, the cost would be 32% of world GDP, including 12% for South & South-East Asia, 5% in East Asia and 8% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as health expenditure was relatively lower at the time). **Sources and series:** wid.world

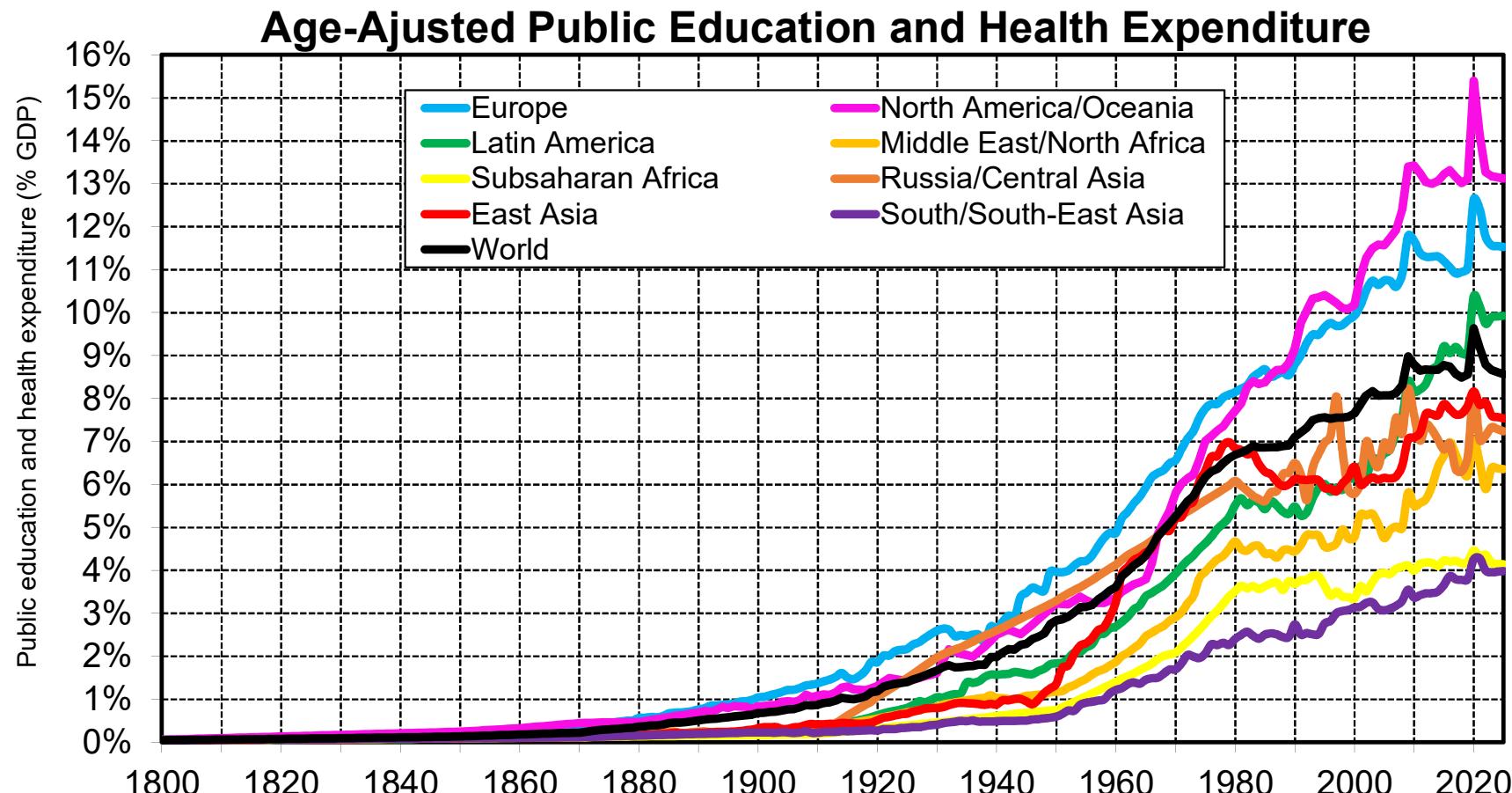
The Cost of Equal Opportunity in Education & Health (50% target)



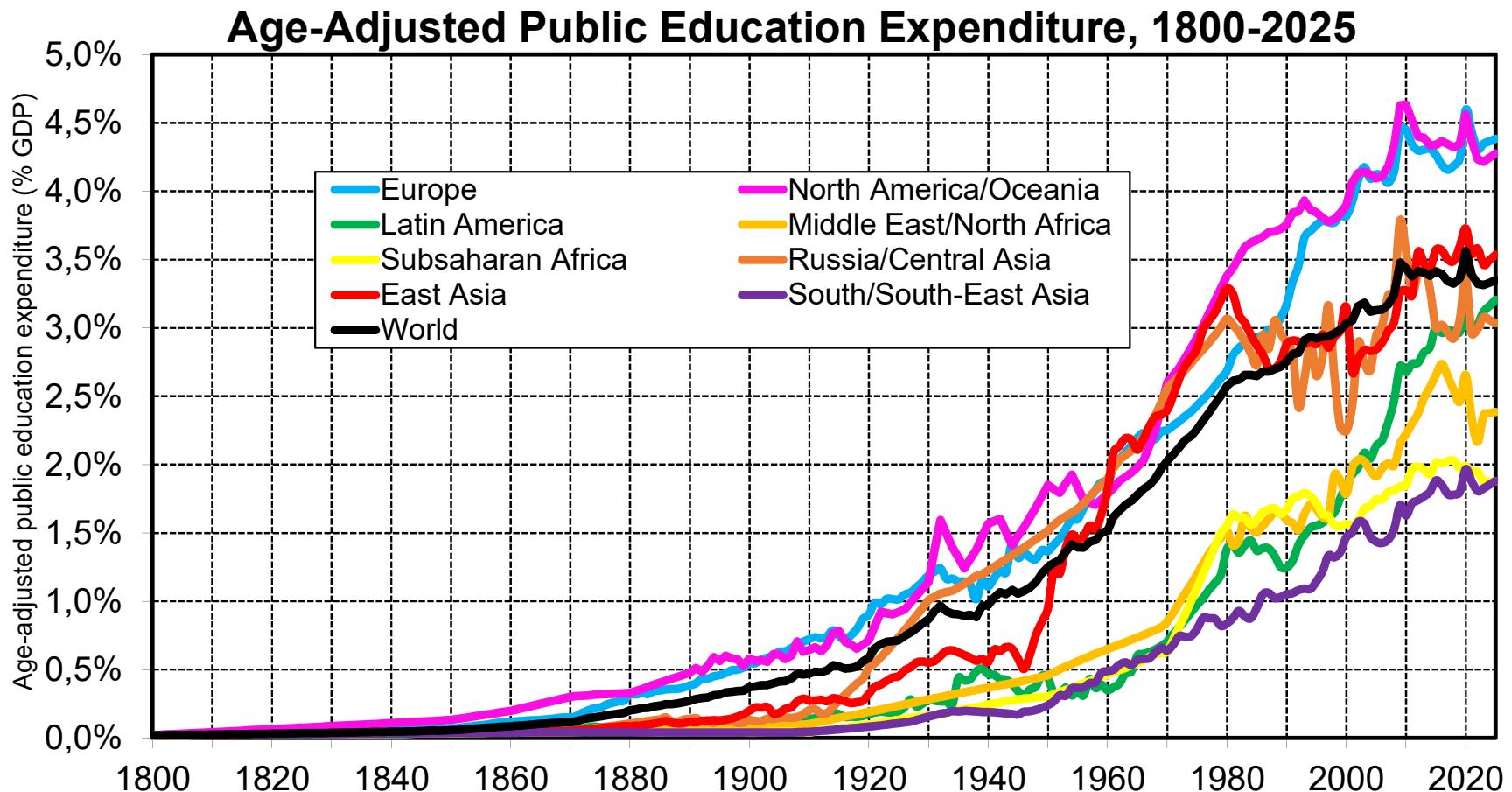
Interpretation. Assume that we raise per capita (age-adjusted) education and health expenditure to 50% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 14% of world GDP, including 6% for South & South-East Asia, 2% in East Asia and 4% for Subsaharan Africa. The cost would have been much lower in the 19th century or in the early 20th century (as health expenditure was relatively lower at the time). **Sources and series:** wid.world



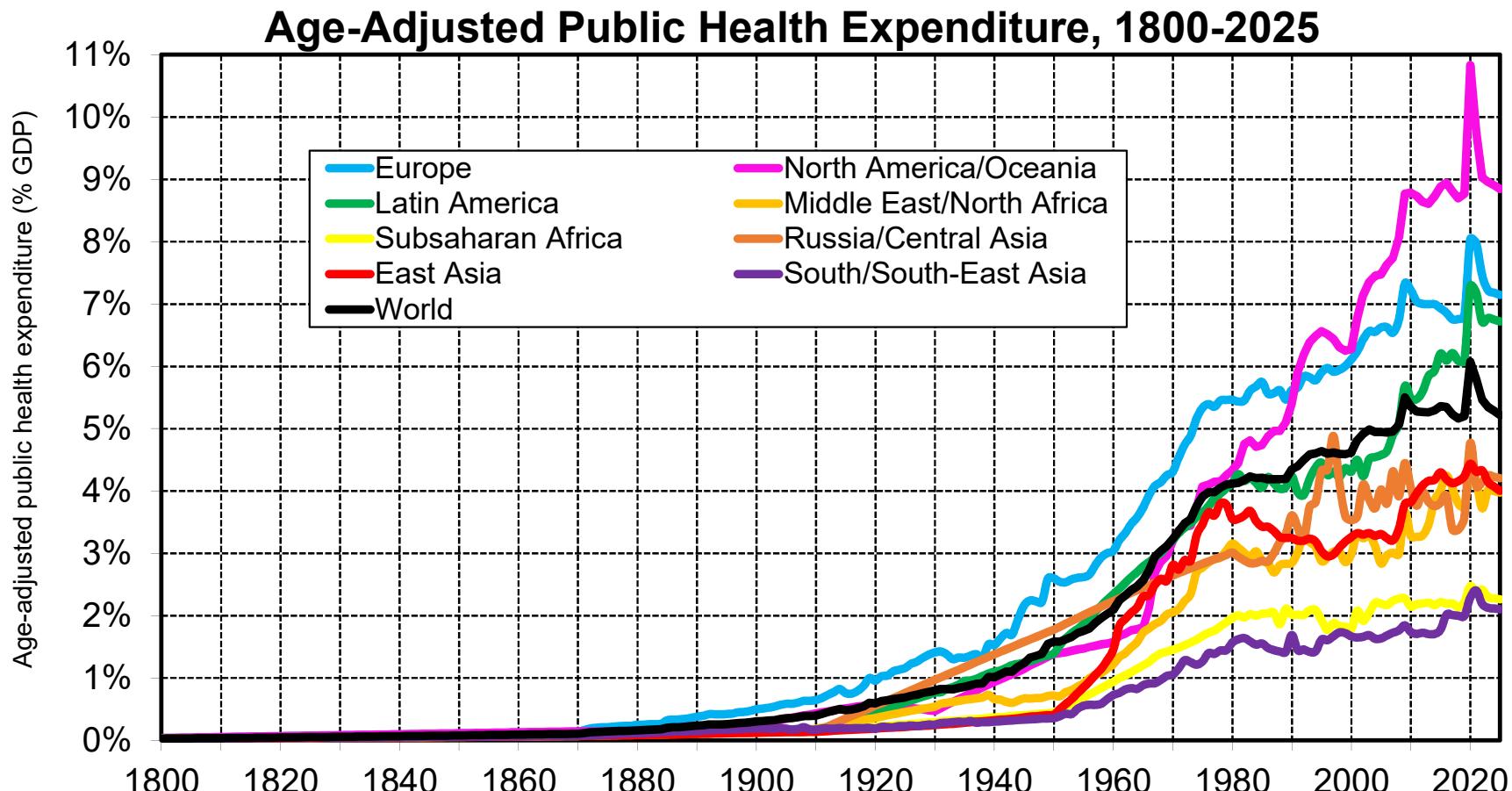
Interpretation. Assume that we raise per capita (age-adjusted) education and health expenditure to 25% of the level observed in Europe/NAOC (in PPP terms) in all countries where it is lower. In 2025, the cost would be 5% of world GDP, including about 2.5% for South & South-East Asia and 2% for Subsaharan Africa. The cost is high but more realistic than full equality of opportunity, and it could contribute to an acceleration in productivity convergence in the coming decades. **Sources and series:** wid.world



Interpretation. Total age-adjusted public education and health expenditure has increased from less than 1% of GDP before 1900 to 9% of GDP in 2025 at the global level, with very large gaps between regions, from 4% of GDP in South & South-East Asia and Subsaharan Africa to 12-13% in Europe and North America/Oceania. The gaps are somewhat larger after age adjustment, as the unequalizing impact of education adjustment more than counterbalances the equalizing impact of health adjustment (especially for SSAF). **Sources and series:** wid.world

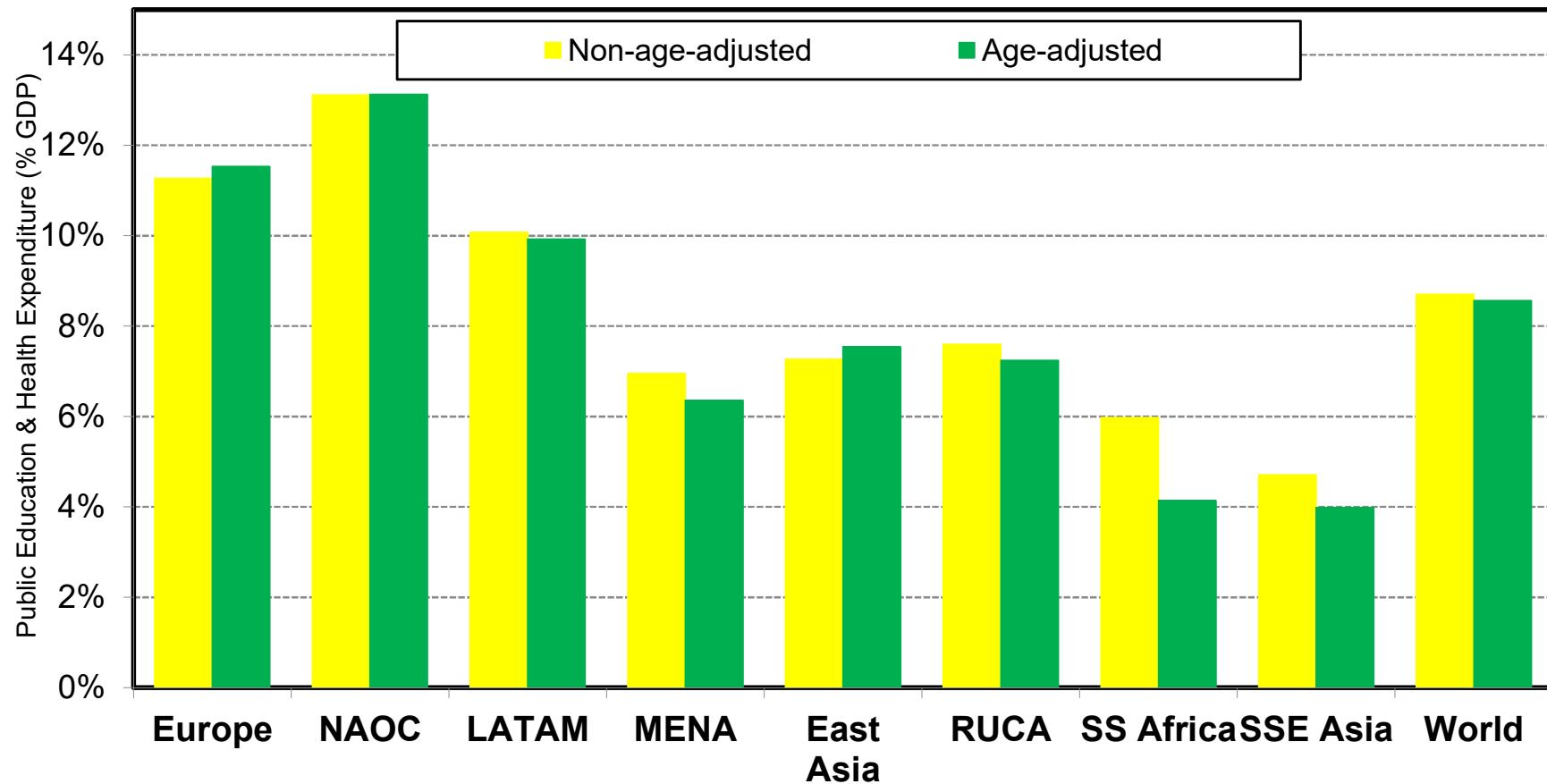


Interpretation. Adjusting for the age structure, i.e. assuming that the share of school-age population (0-to-24-year-old) is equal to 25% in all countries-years (\approx Europe 2025) and keeping the same per-school-age-individual expenditure as in observed country-year, we find that public education expenditure varies from about 2% of GDP in Subsaharan Africa and South & South-East Asia to about 4.5% of GDP in Europe and North America/Oceania. **Sources and series:** wid.world



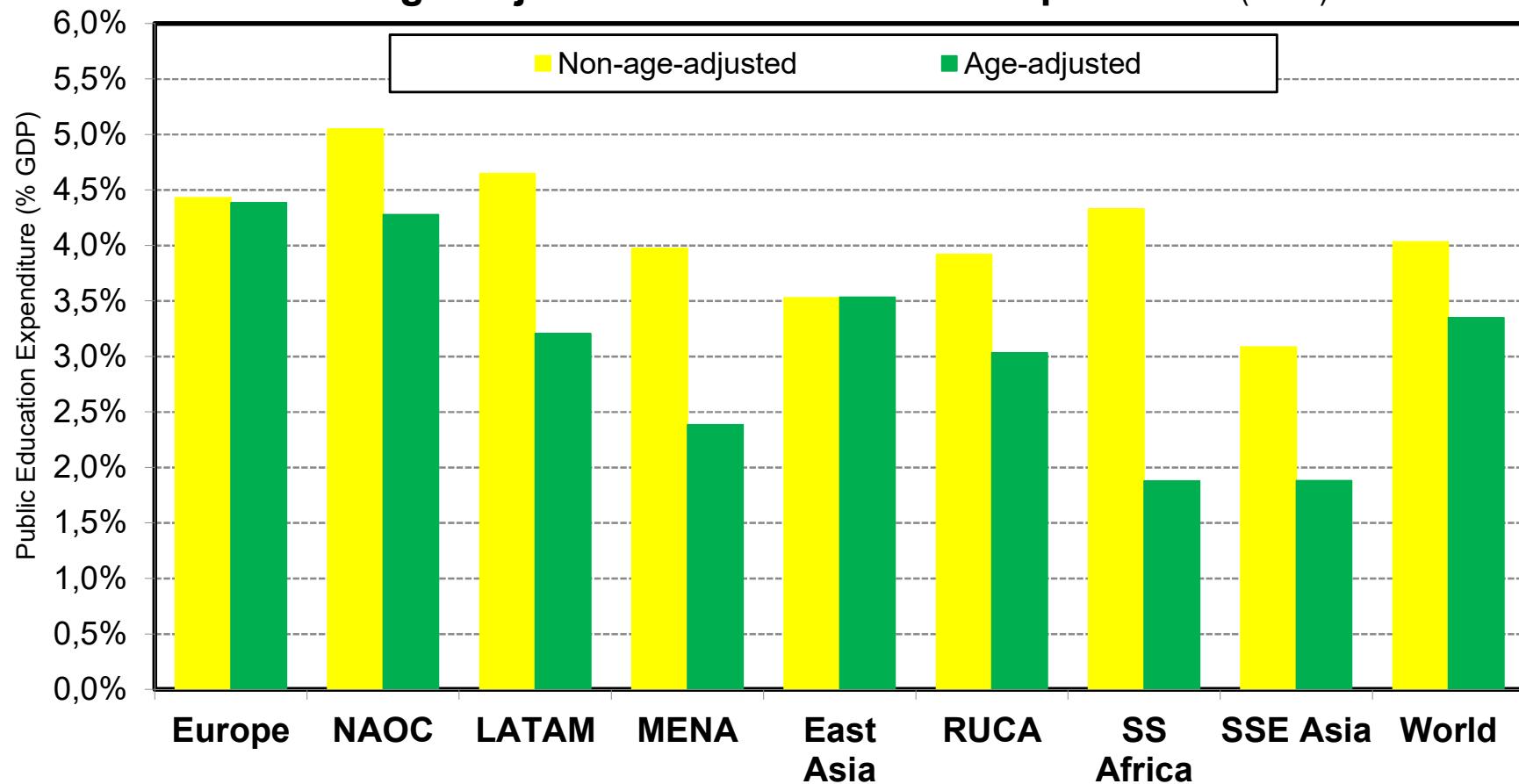
Interpretation. Adjusting for the age structure, i.e. assuming that the share of old-age population (65-year-old+) is equal to 25% in all countries (\approx Europe 2030) and taking into account that average per capita health expenditure is on average about 3 times larger for old-age individuals than for the rest of the population, we find that public health expenditure varies from about 2% of GDP in Subsaharan Africa and South & South-East Asia to about 8-9% of GDP in Europe and North America/Oceania. **Sources and series:** wid.world

Age-Adjusted Public Education & Health Expenditure (2025)



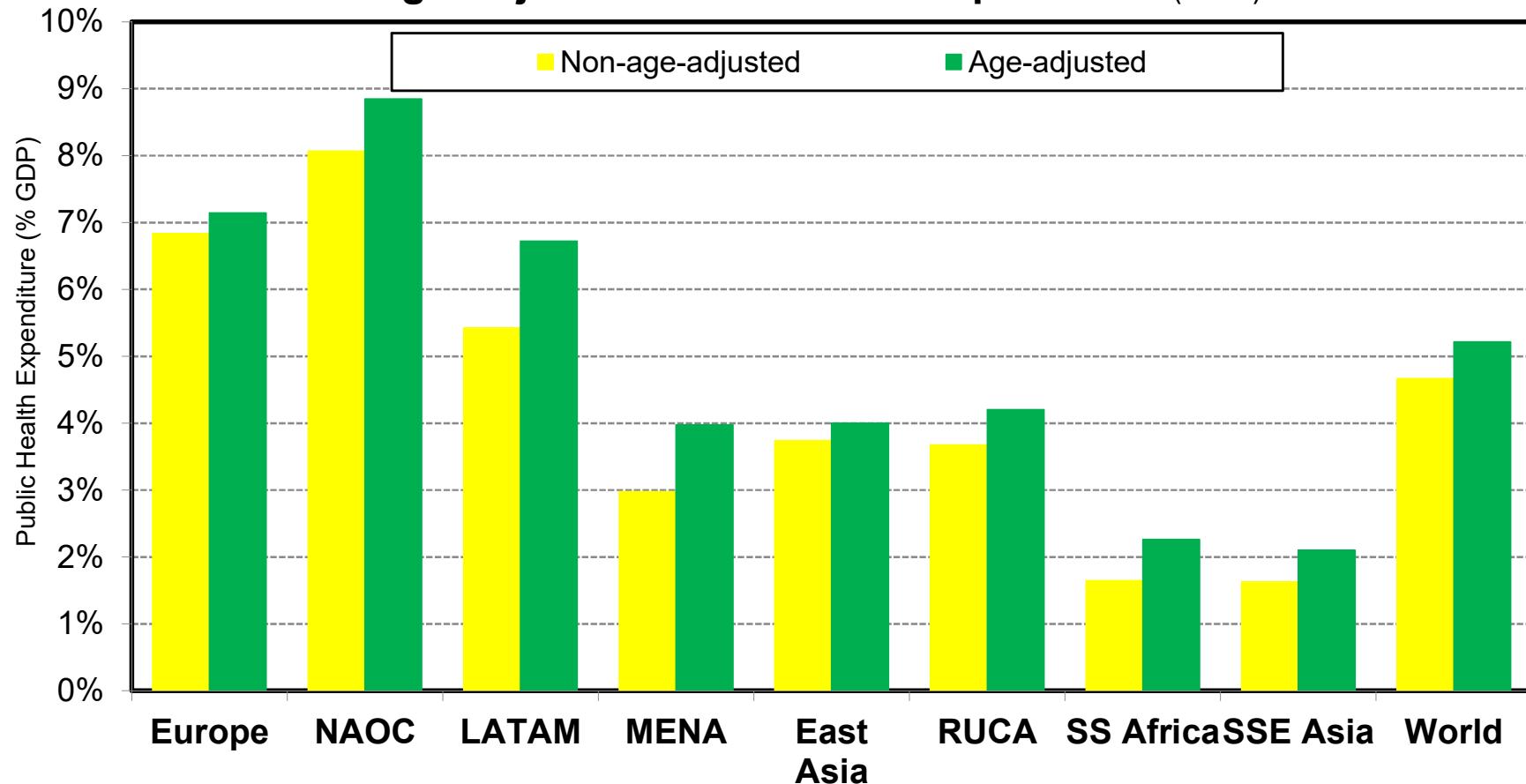
Interpretation. Public education and health expenditure represents about 11-13% of GDP in the richest regions (Europe, North America/Oceania) vs 4-6% of GDP in the poorest regions (Subsaharan Africa, South & South-East Asia). The gaps between rich and poor regions are larger after age adjustment, as the unequalizing impact of education adjustment more than counterbalances the equalizing impact of health adjustment (especially for SSAF). **Sources and series:** wid.world

Age-Adjusted Public Education Expenditure (2025)

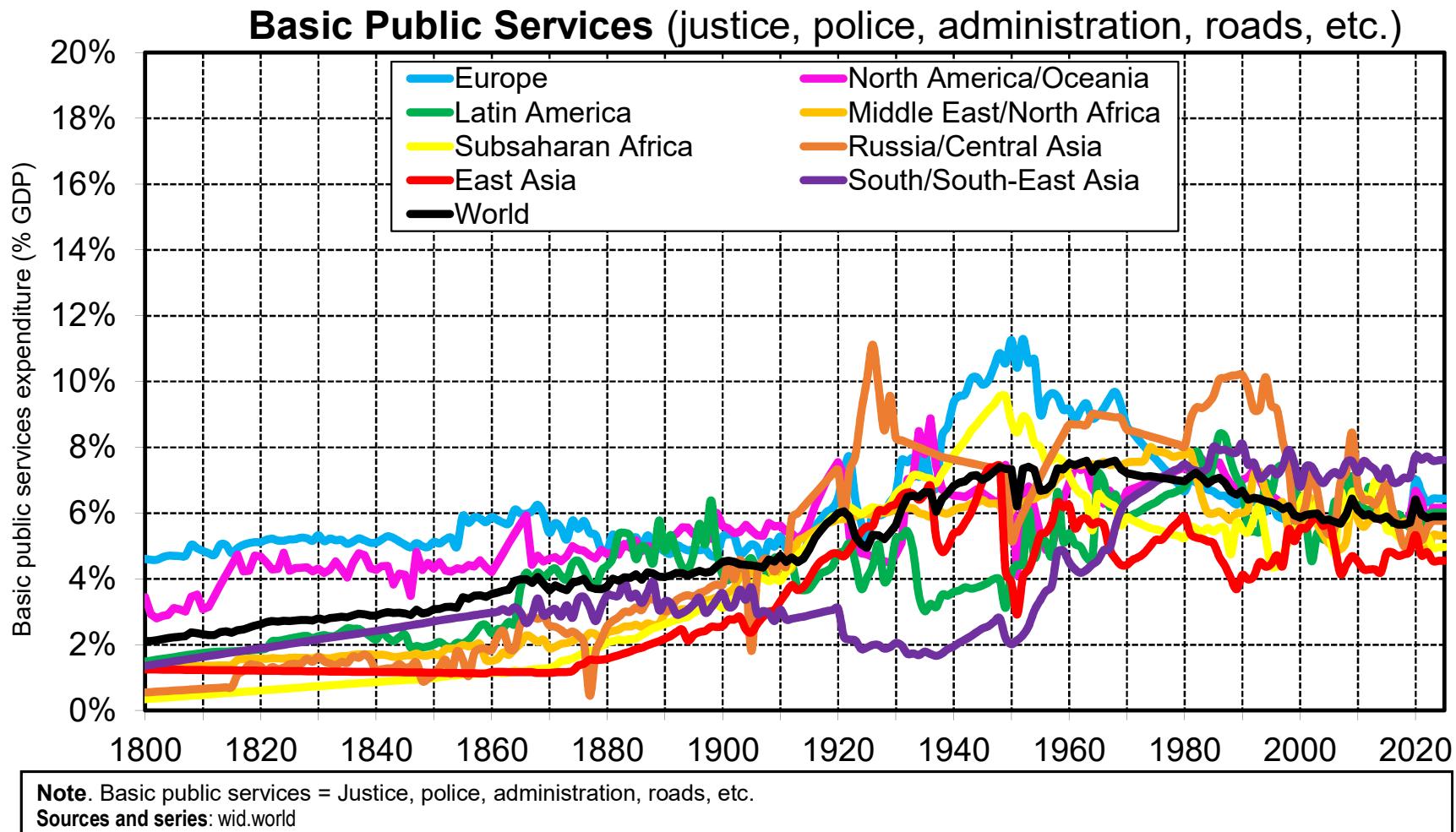


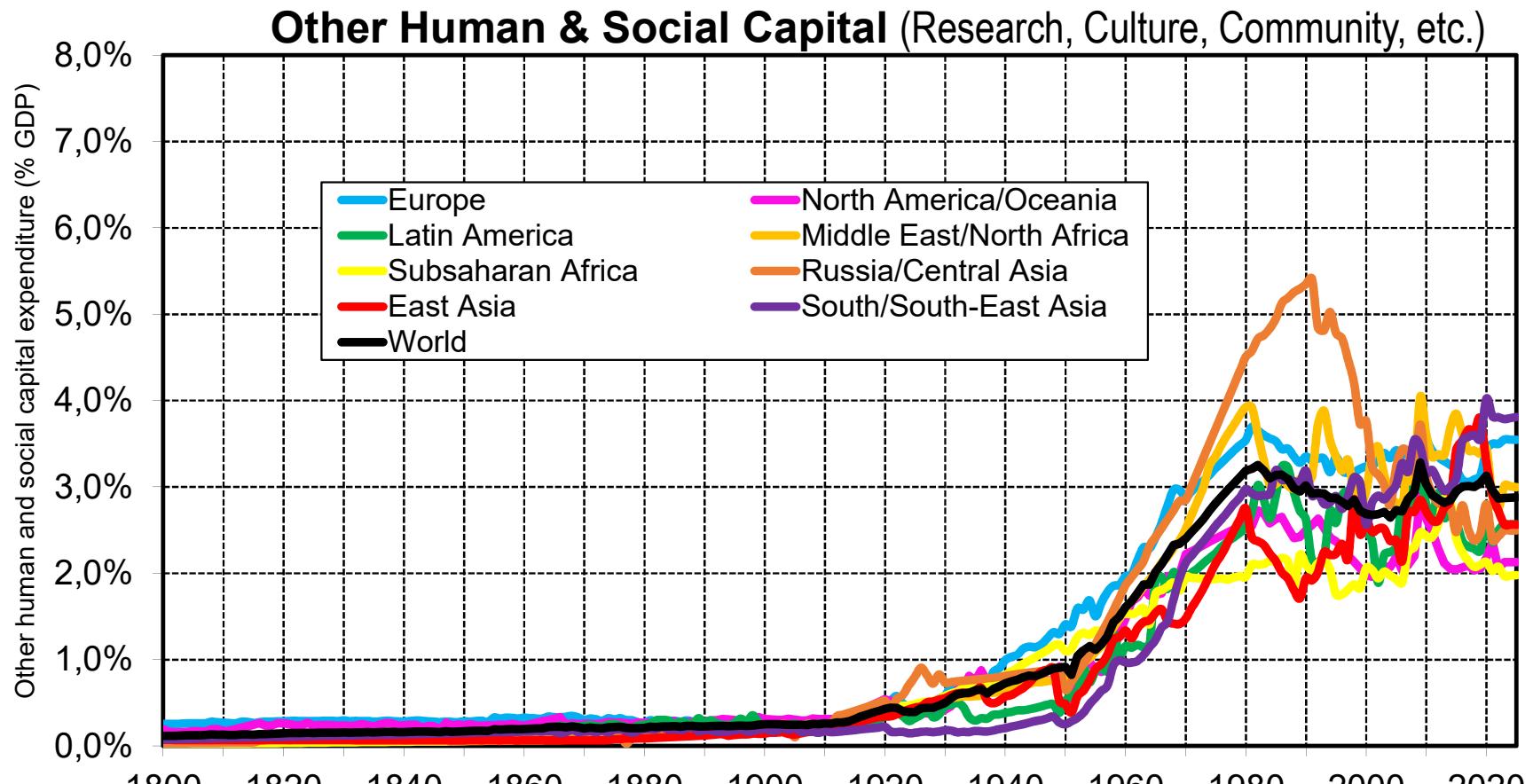
Interpretation. After adjustment for age structure, public education expenditure appears to much larger in the richest regions (about 4-4.5% of GDP in Europe and North America/Oceania) than in the poorest regions (less than 2% of GDP in Subsaharan Africa and South & South-East Asia). **Sources and series:** wid.world

Age-Adjusted Public Health Expenditure (2025)



Interpretation. After adjustment for age structure, public health expenditure continues to be much larger in the richest regions (about 7-9% of GDP in Europe and North America/Oceania) than in the poorest regions (about 2% of GDP in Subsaharan Africa and South & South-East Asia).
Sources and series: wid.world

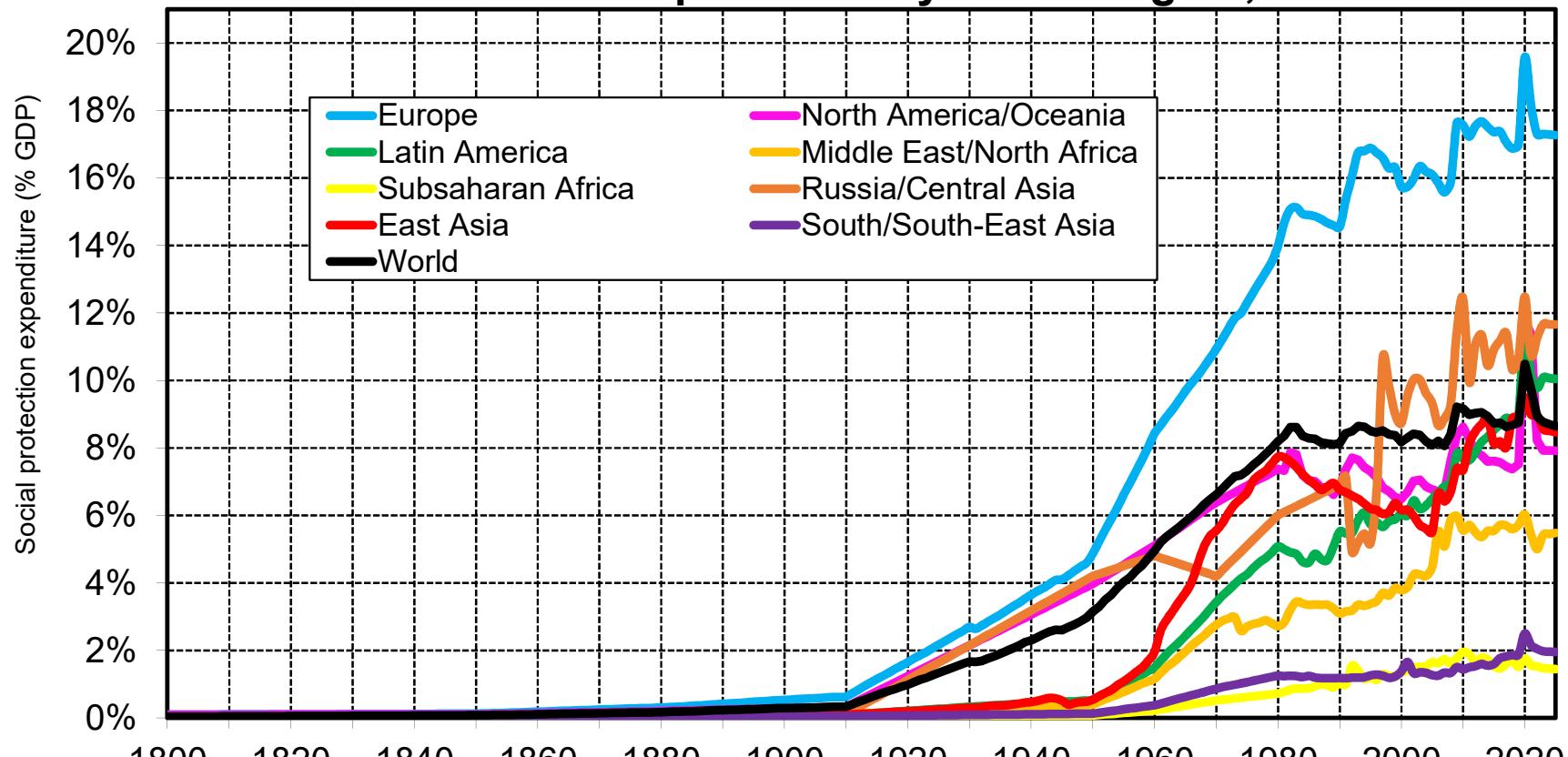




Note. Other human and social capital expenditure = Research, culture, community services, environmental protection

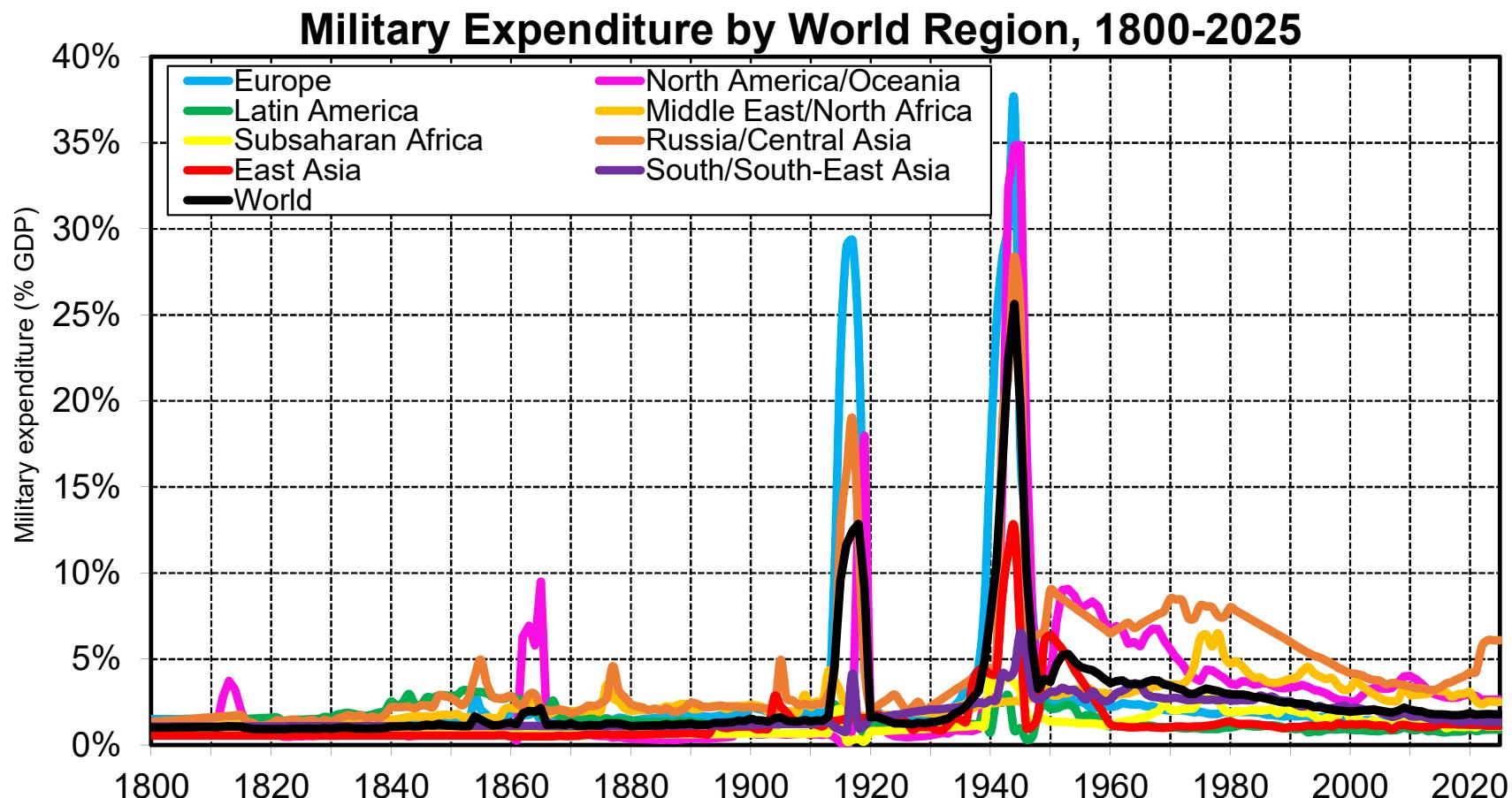
Sources and series: [wid.world](#)

Social Protection Expenditure by World Region, 1800-2025



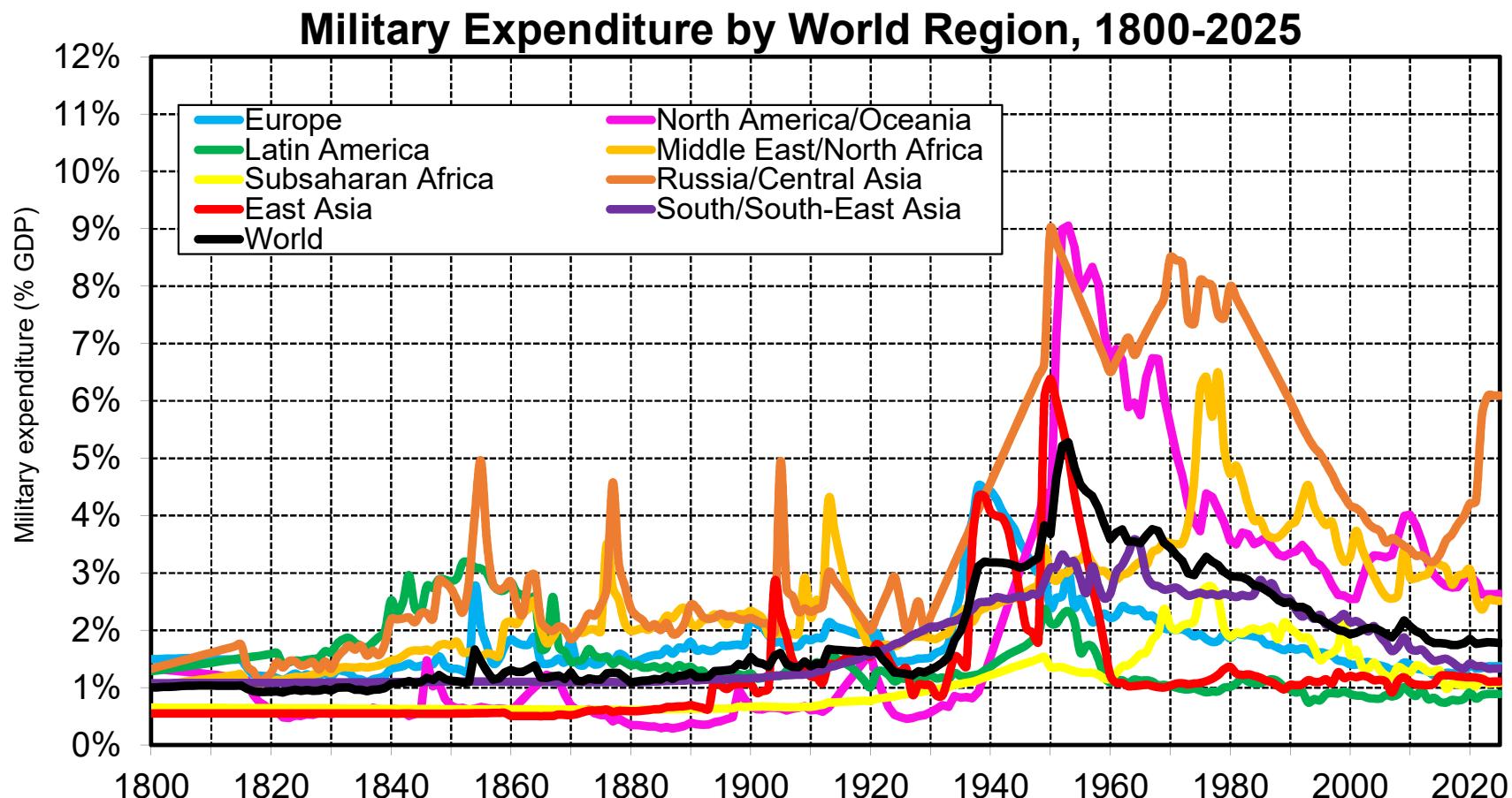
Note. Social protection expenditure includes social insurance and social assistance (old-age, unemployment, etc.)

Sources and series: [wid.world](#)

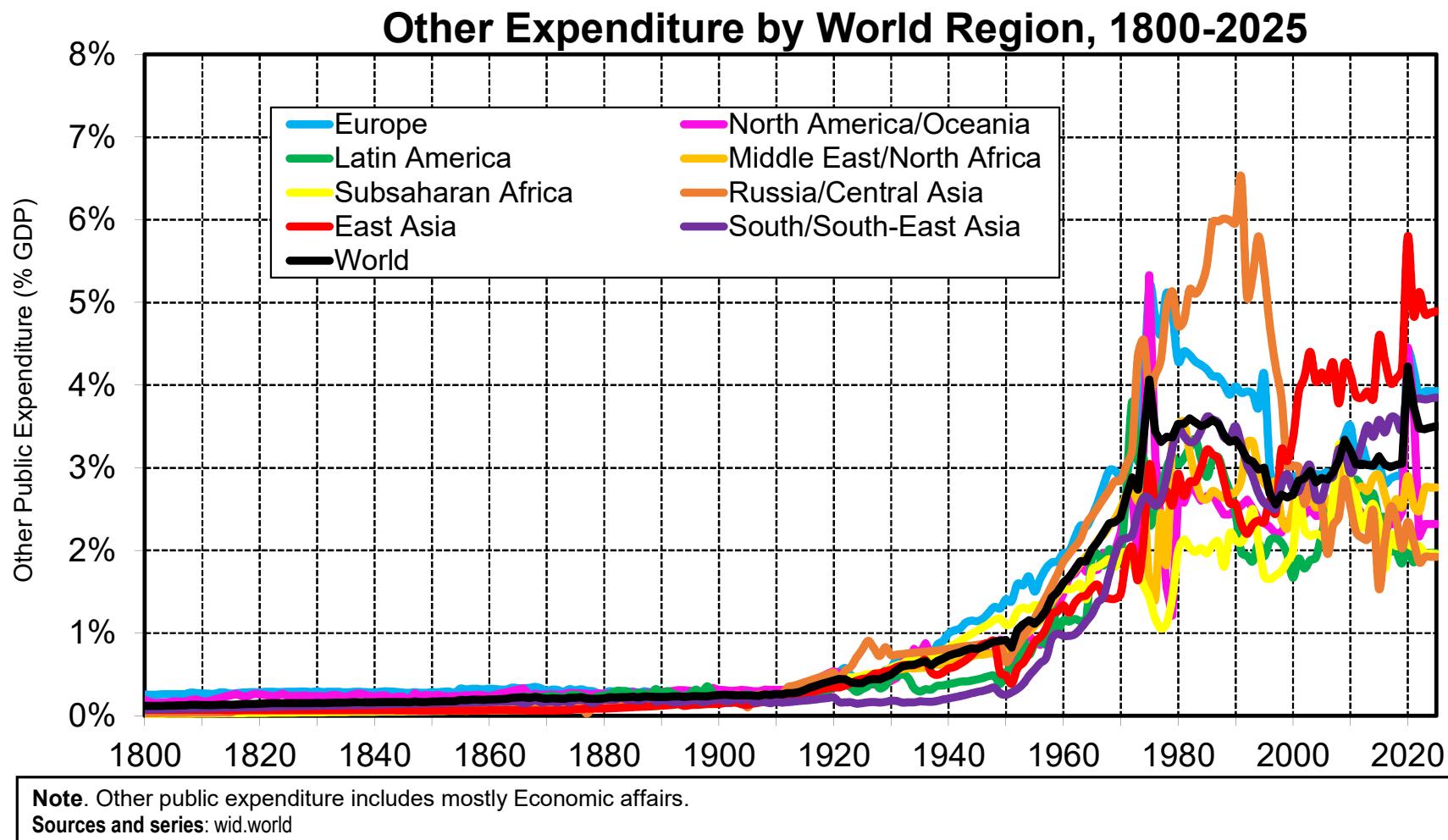


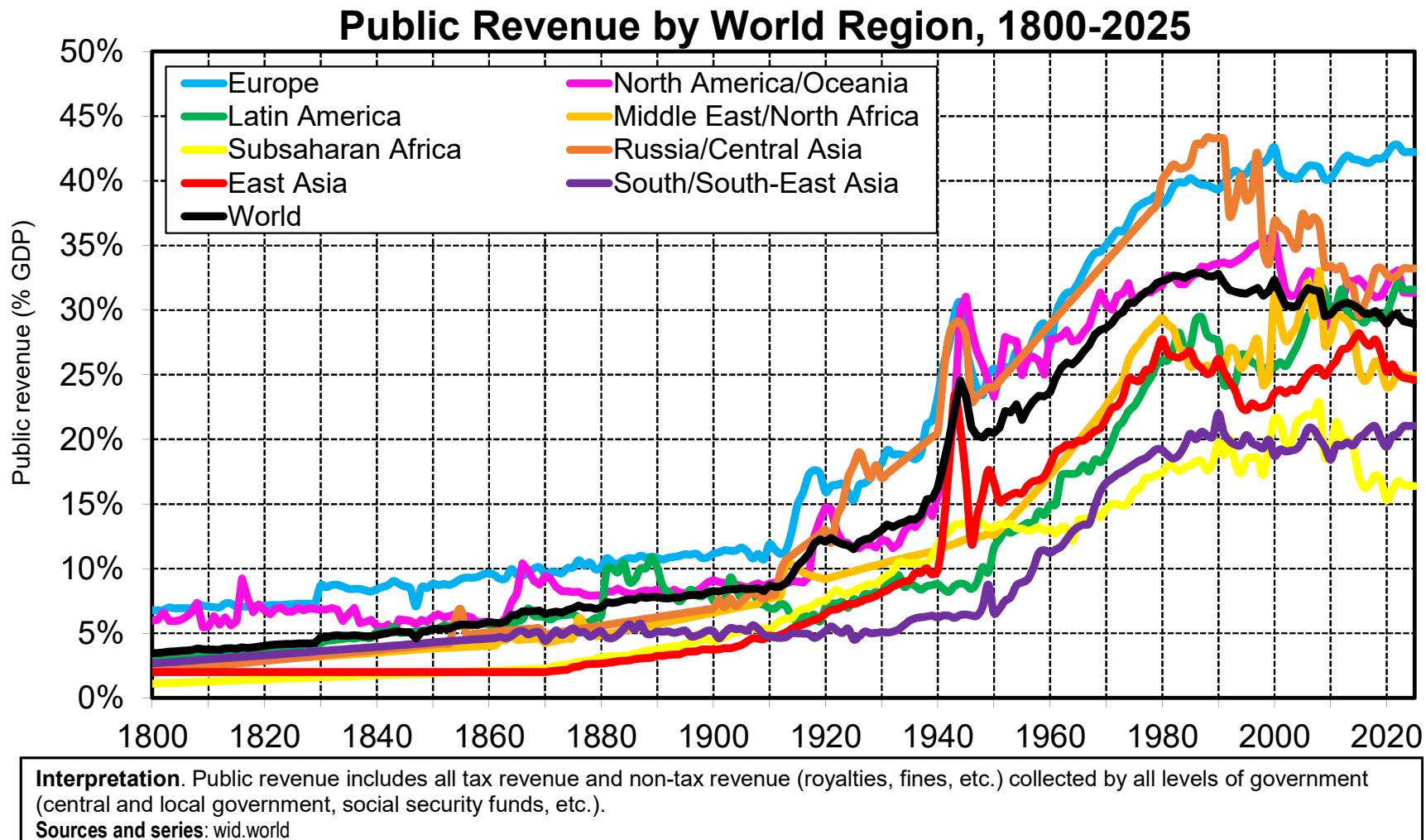
Interpretation. In most world regions, military expenditure has generally oscillated around 1-2% of GDP, with major spikes during world wars (20-30% of GDP or more) and very high levels in USA-USSR during the cold war (5-10% of GDP).

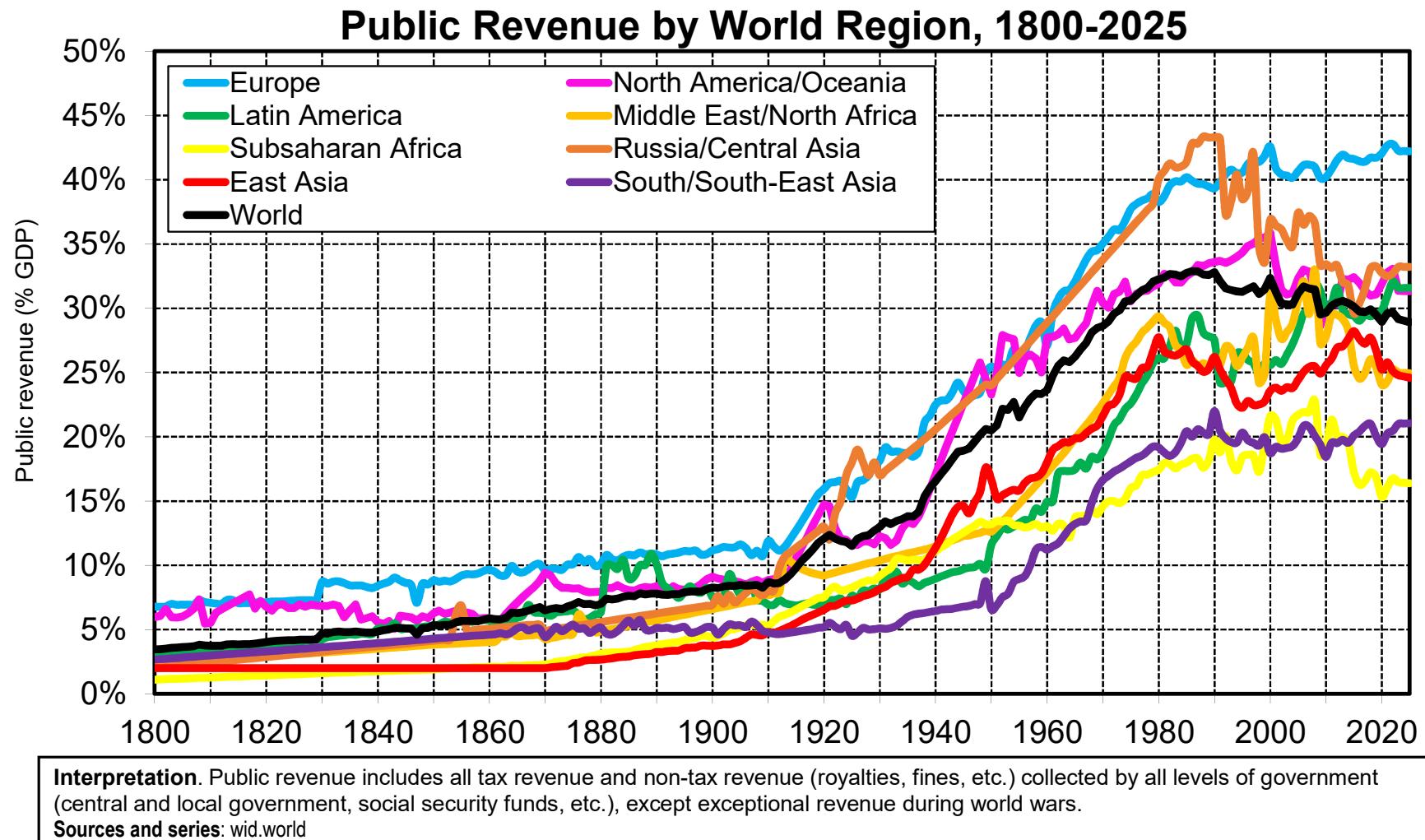
Sources and series: wid.world

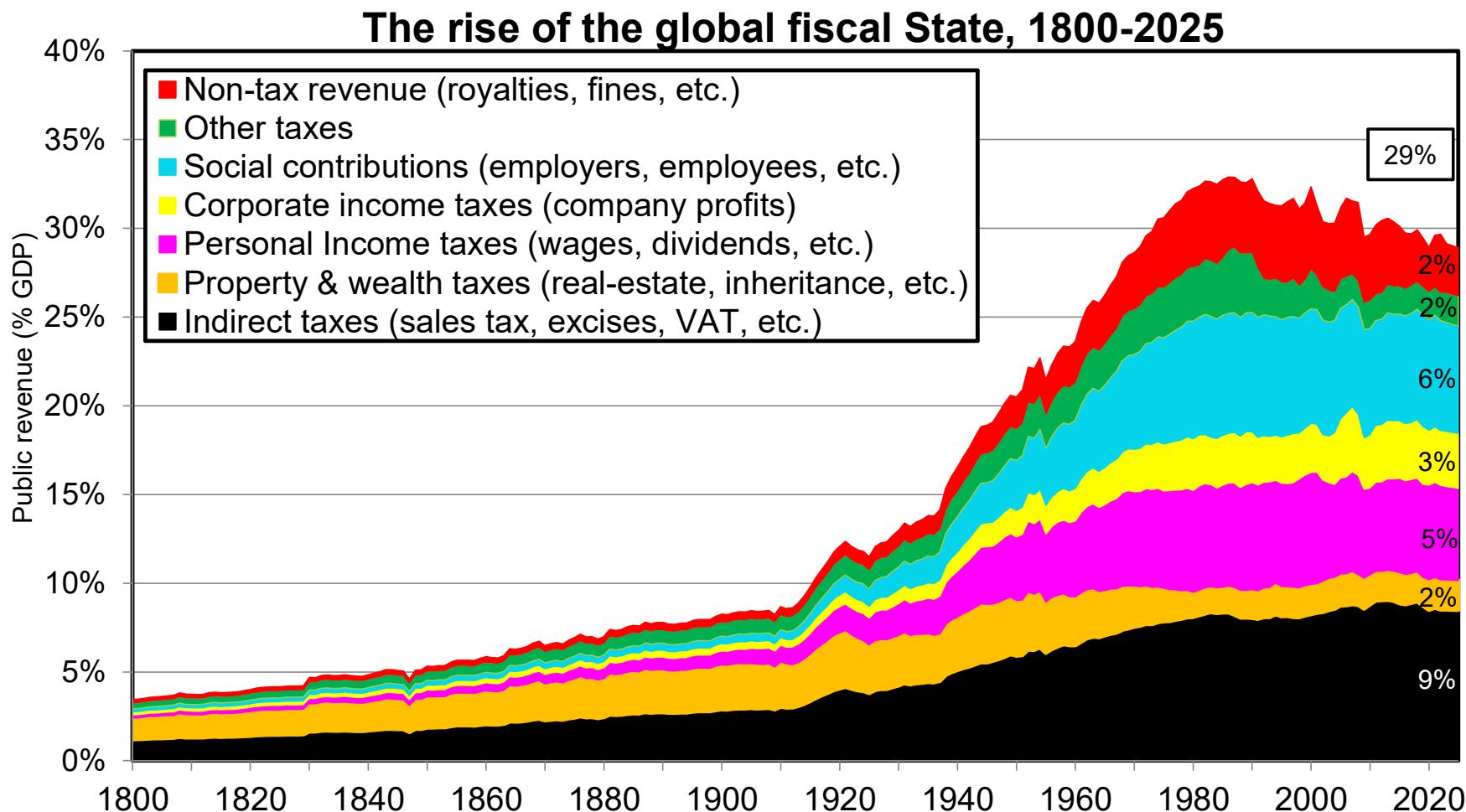


Interpretation. After excluding exceptional military expenditure during world wars, we find that military expenditure has generally oscillated around 1-2% of GDP in most world regions over the 1800-2025 period, with unusually high levels in USA-USSR during the cold war (5-8% of GDP). **Sources and series:** wid.world



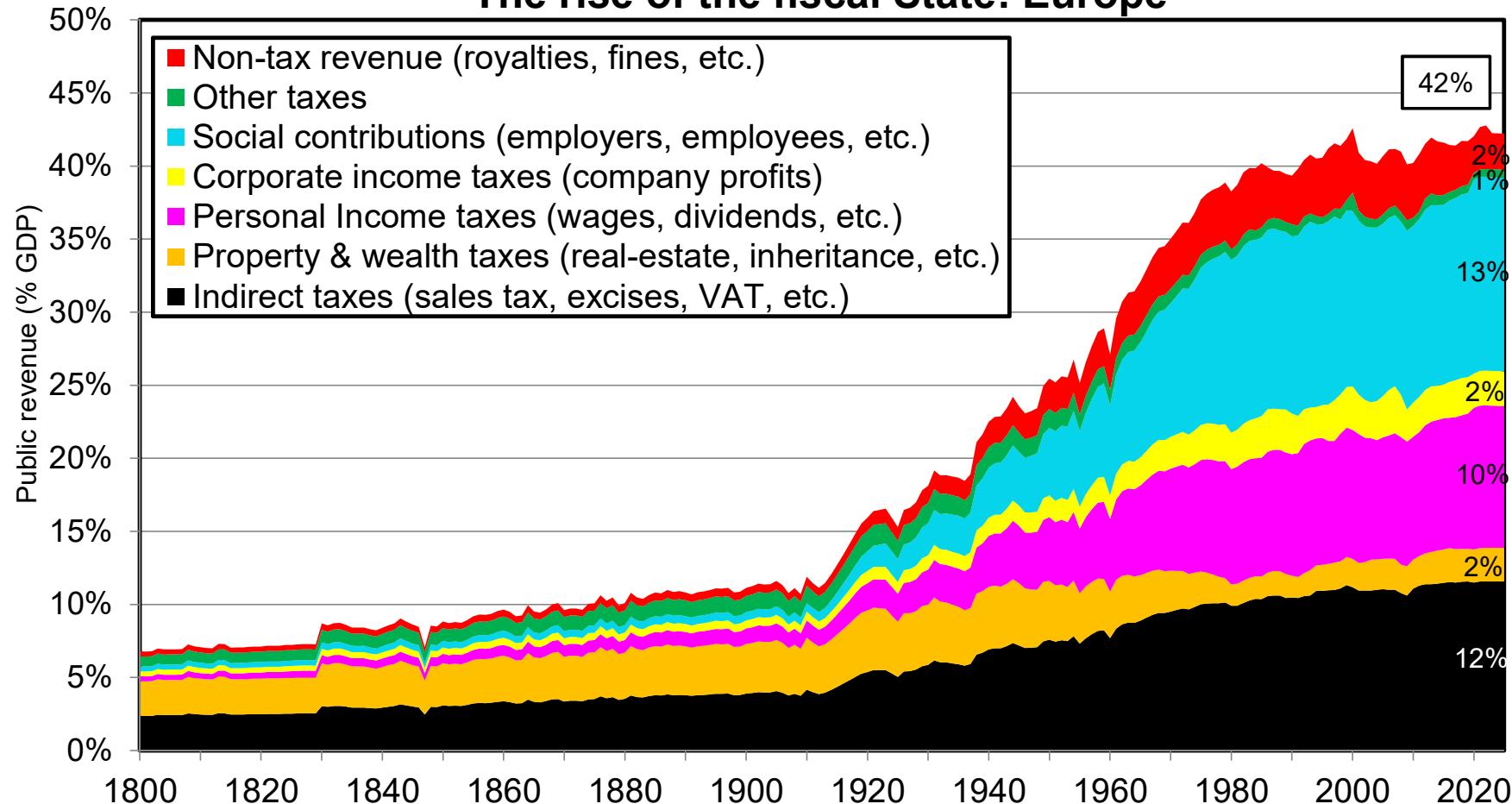




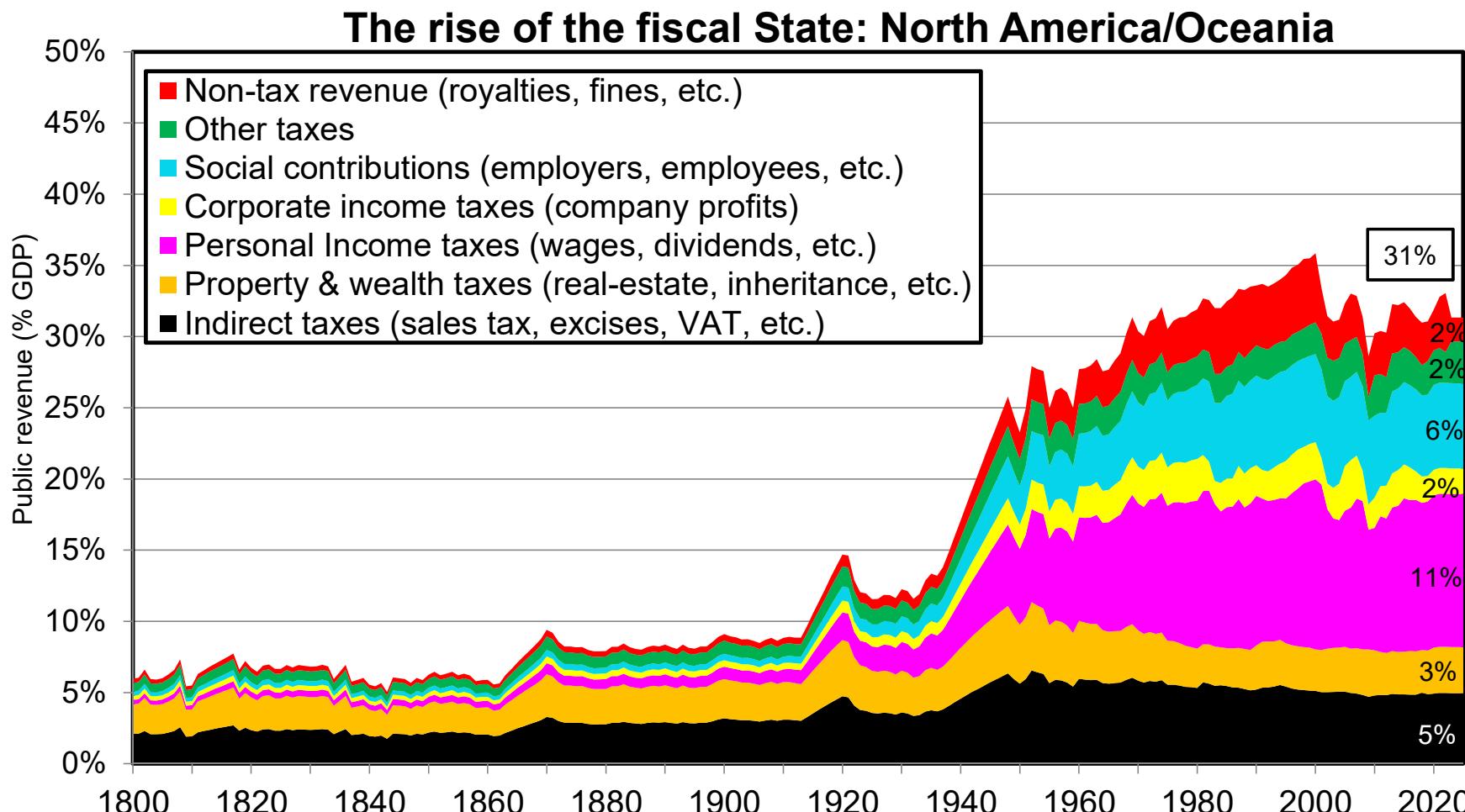


Interpretation. In 2025, total public revenue amounts to about 29% of global GDP (PPP), including 9% for indirect taxes (sales taxes, excises, VAT, etc.), 2% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 5% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 6% for social contributions (employers, employees, self-employed), 2% for other taxes and 2% for non-tax revenue (royalties, fines and other non-tax compulsory payments, excluding government sales of goods and services (e.g. university tuitions), which are included in private expenditure). Sources and series: [wid.world](#)

The rise of the fiscal State: Europe

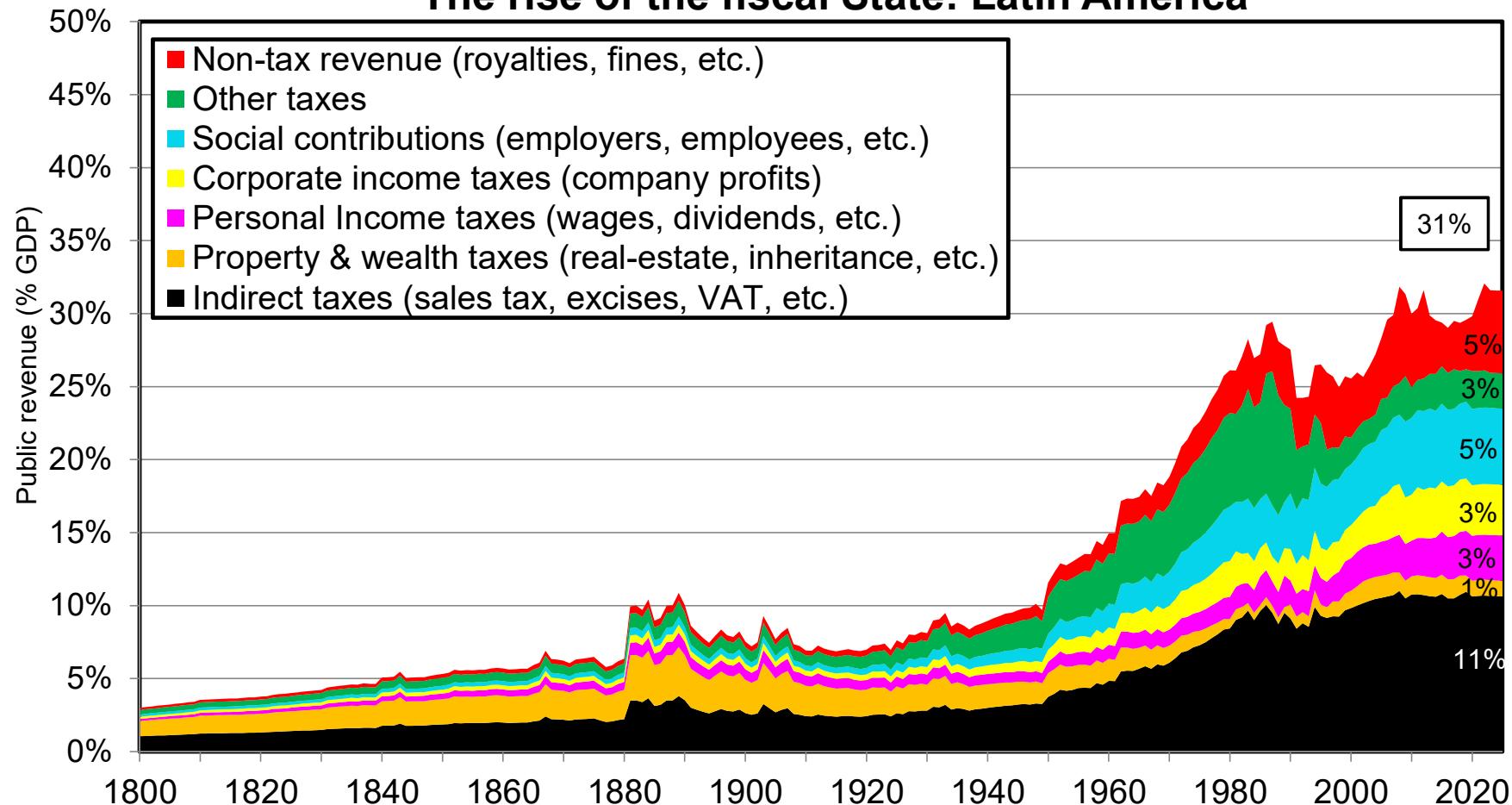


Interpretation. In 2025, total public revenue amounts to about 42% of GDP in Europe, including 12% for indirect taxes (sales taxes, excises, VAT, etc.), 2% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 10% for personal income taxes (taxes on household income: wages, dividends, etc.), 2% for corporate income taxes (taxes on company profits), 13% for social contributions (employers, employees, self-employed), 1% for other taxes and 2% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world

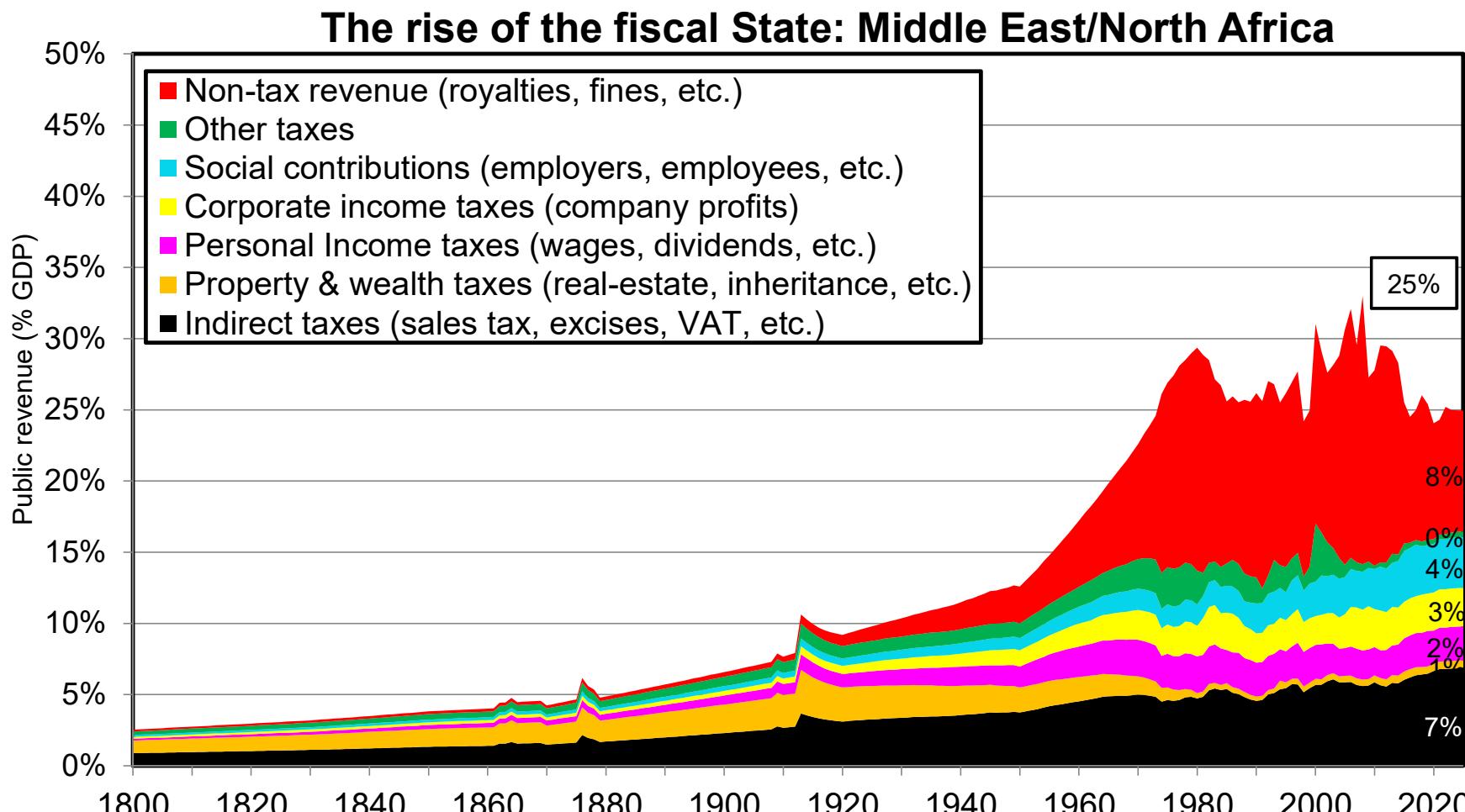


Interpretation. In 2025, total public revenue amounts to about 31% of GDP in North America/Oceania, including 5% for indirect taxes (sales taxes, excises, etc.), 3% for property and wealth taxes (annual taxes on real estate & other property, inheritance taxes, etc.), 11% for personal income taxes (taxes on household income: wages, dividends, etc.), 2% for corporate income taxes (taxes on company profits), 6% for social contributions (employers, employees, self-employed), 2% for other taxes and 2% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world

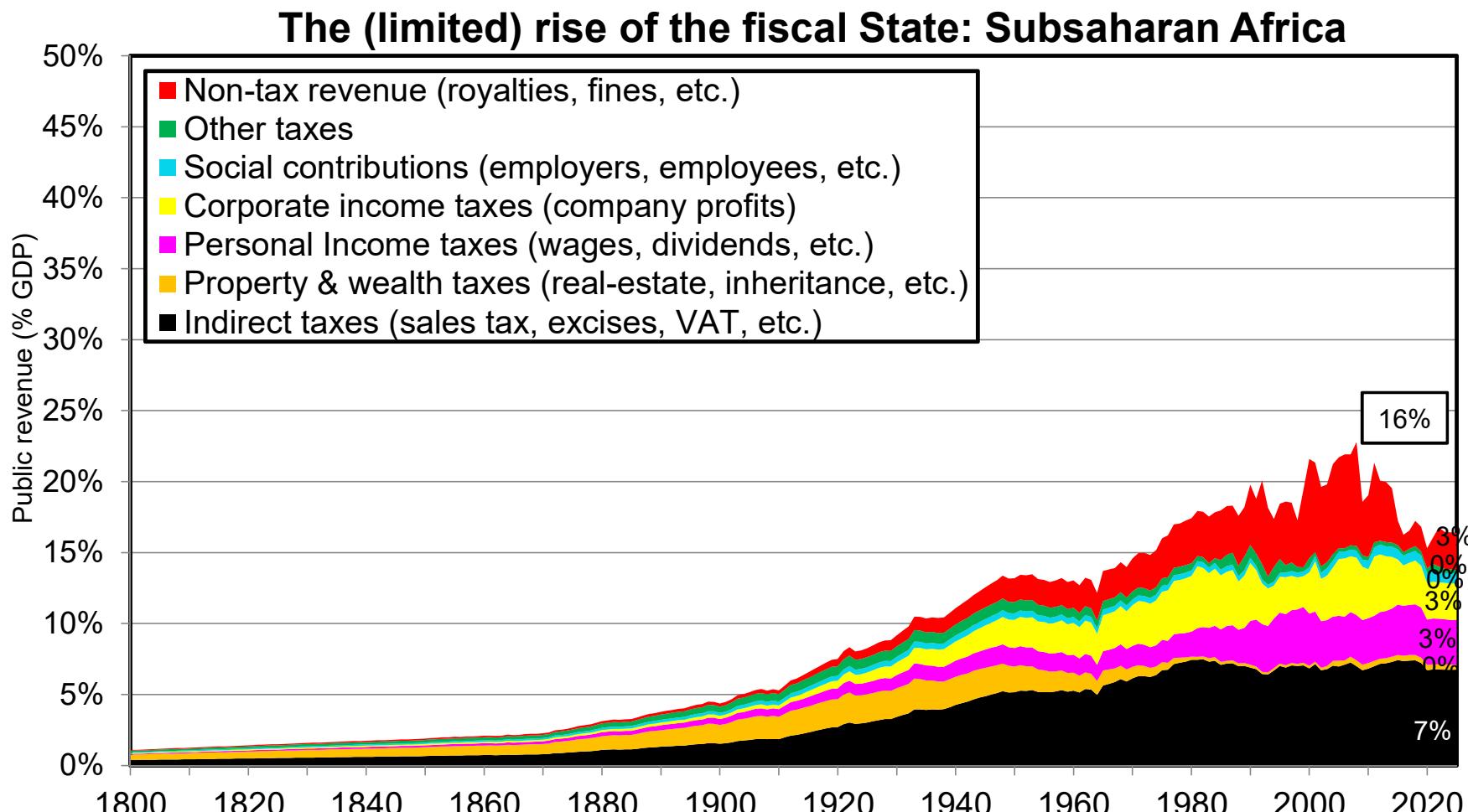
The rise of the fiscal State: Latin America



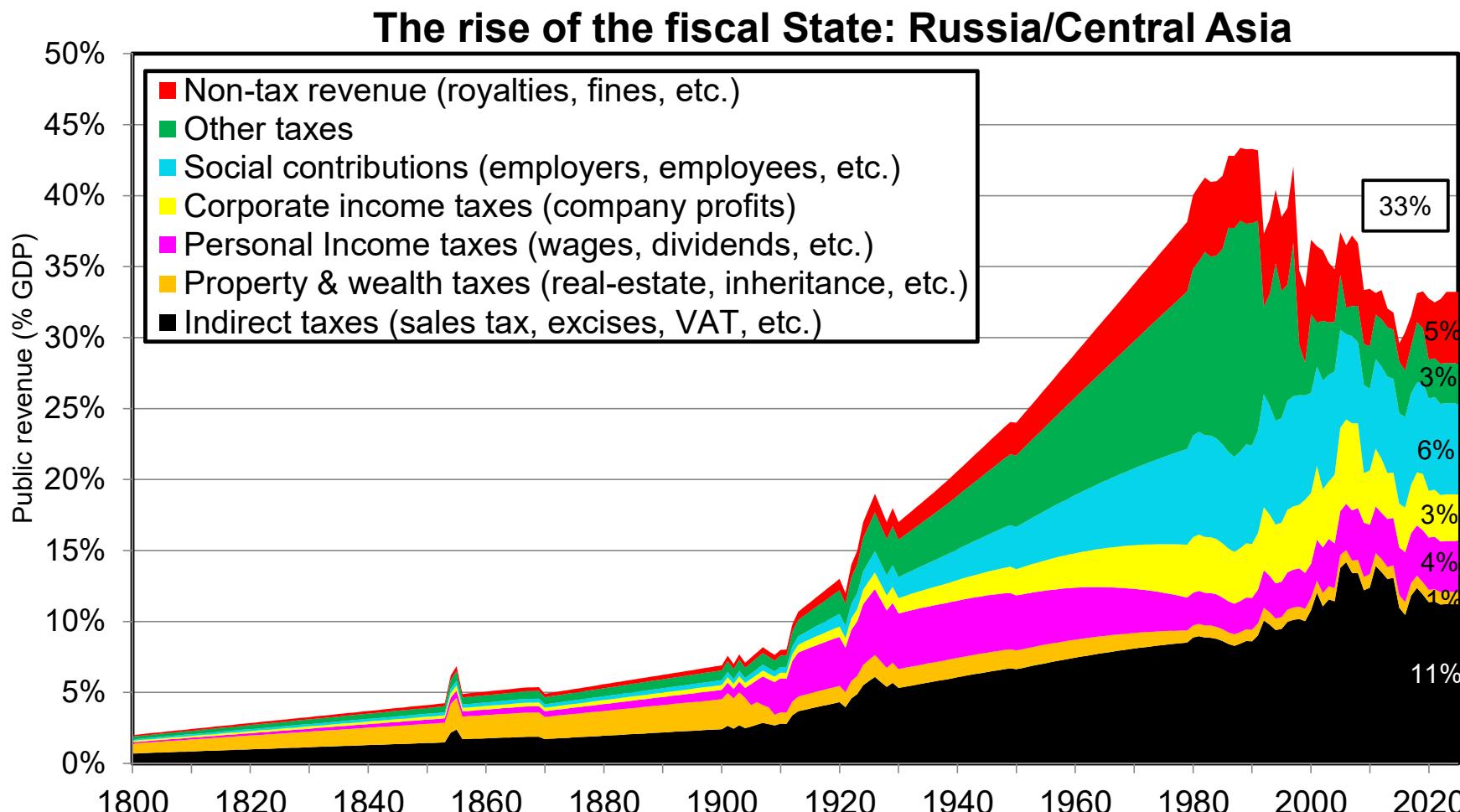
Interpretation. In 2025, total public revenue amounts to about 31% of GDP in Latin America, including 11% for indirect taxes (sales taxes, excises, etc.), 1% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 3% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 5% for social contributions (employers, employees, self-employed), 3% for other taxes and 5% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world



Interpretation. In 2025, total public revenue amounts to about 25% of GDP in MENA, including 7% for indirect taxes (sales taxes, excises, VAT, etc.), 1% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 2% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 4% for social contributions (employers, employees, self-employed), 0% for other taxes and 8% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world

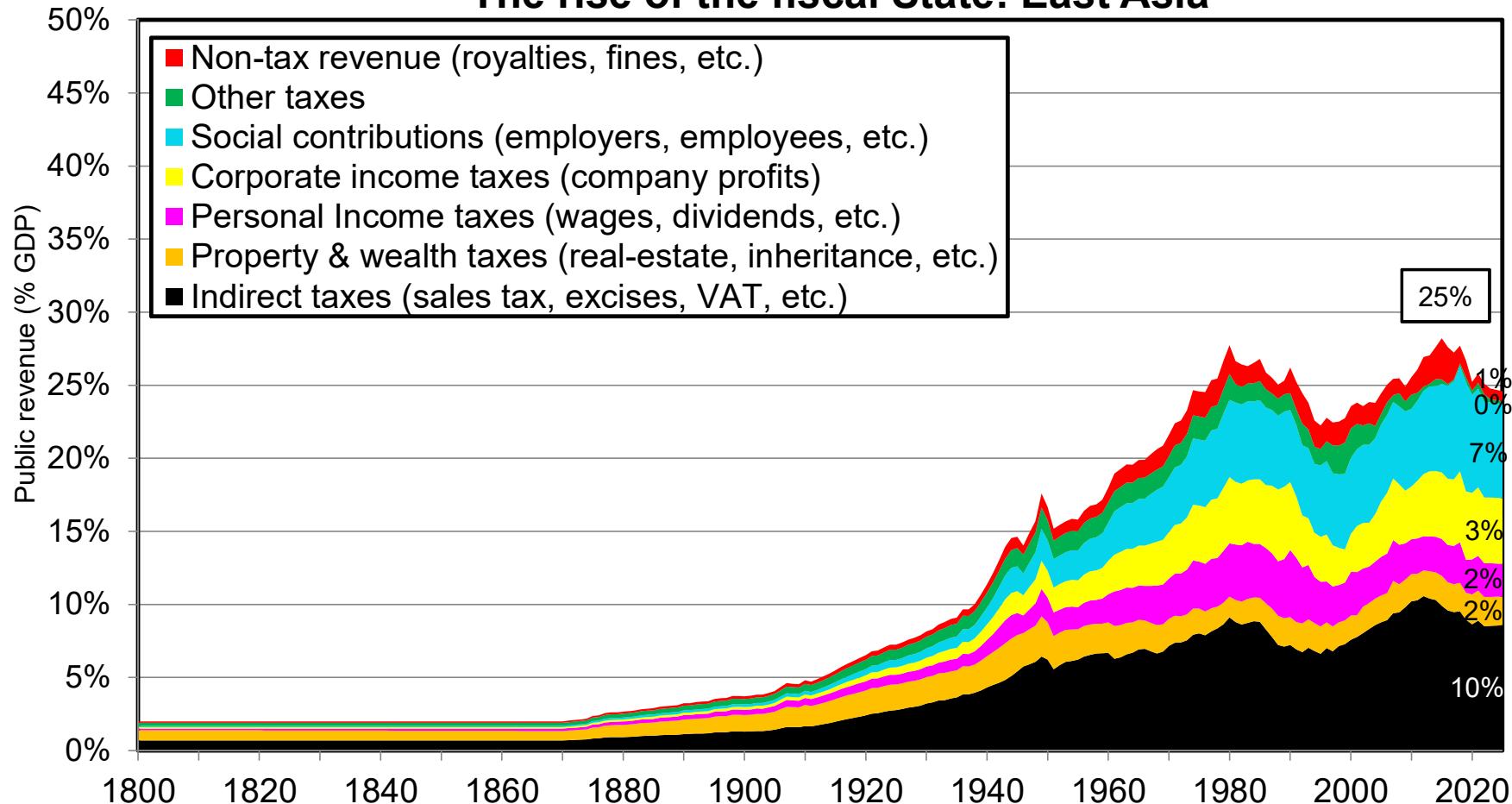


Interpretation. In 2025, total public revenue amounts to about 16% of GDP in Subsaharan Africa, including 7% for indirect taxes (sales taxes, excises, etc.), 0% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 3% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 0% for social contributions (employers, employees, self-employed), 0% for other taxes and 3% for non-tax revenue (royalties, fines, etc.). Sources and series: wid.world



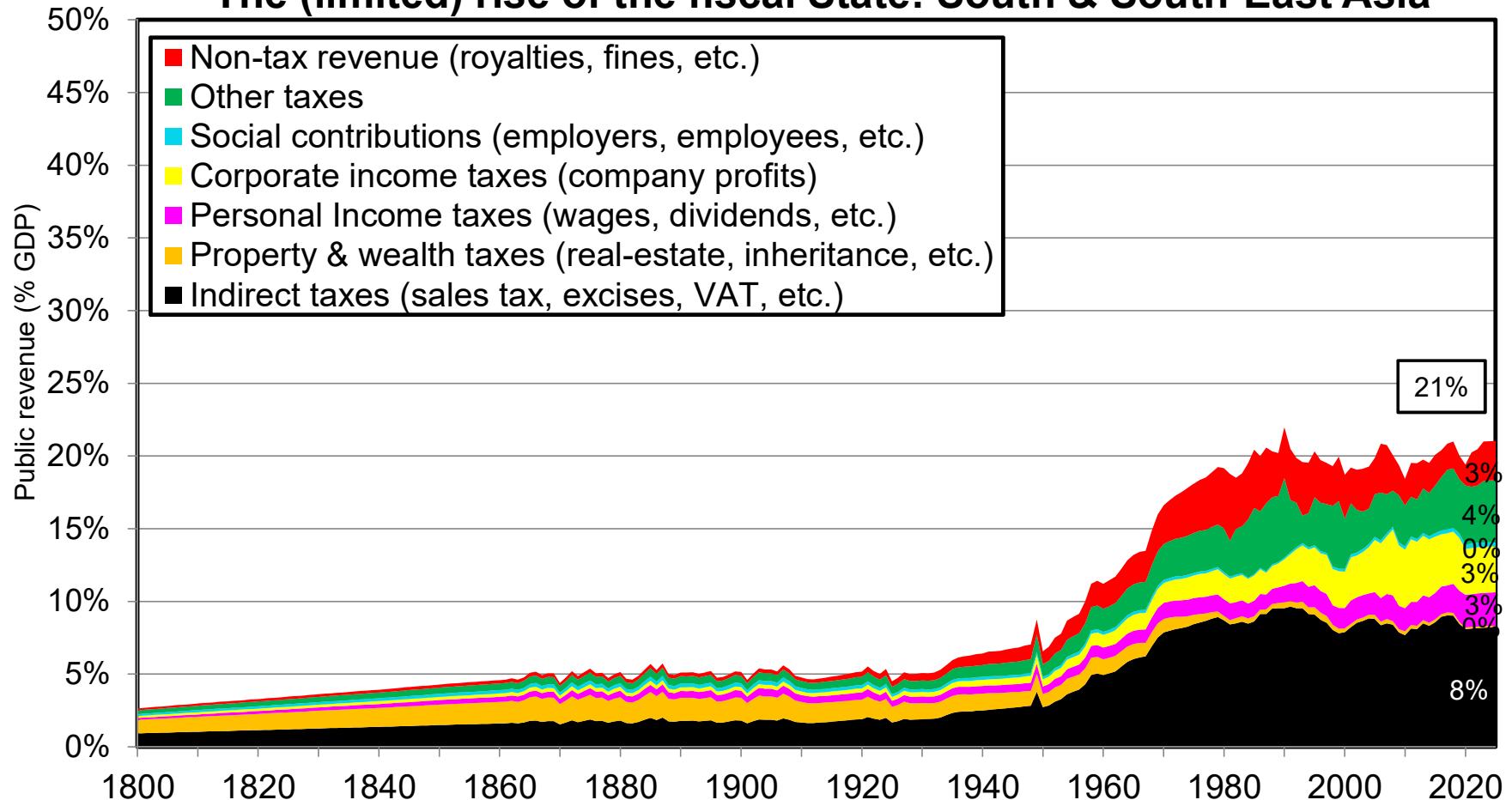
Interpretation. In 2025, total public revenue amounts to about 33% of GDP in Russia/Central Asia, including 11% for indirect taxes (sales taxes, excises, etc.), 1% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 4% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 6% for social contributions (employers, employees, self-employed), 3% for other taxes and 5% for non-tax revenue (royalties, fines, etc.). Sources and series: wid.world

The rise of the fiscal State: East Asia

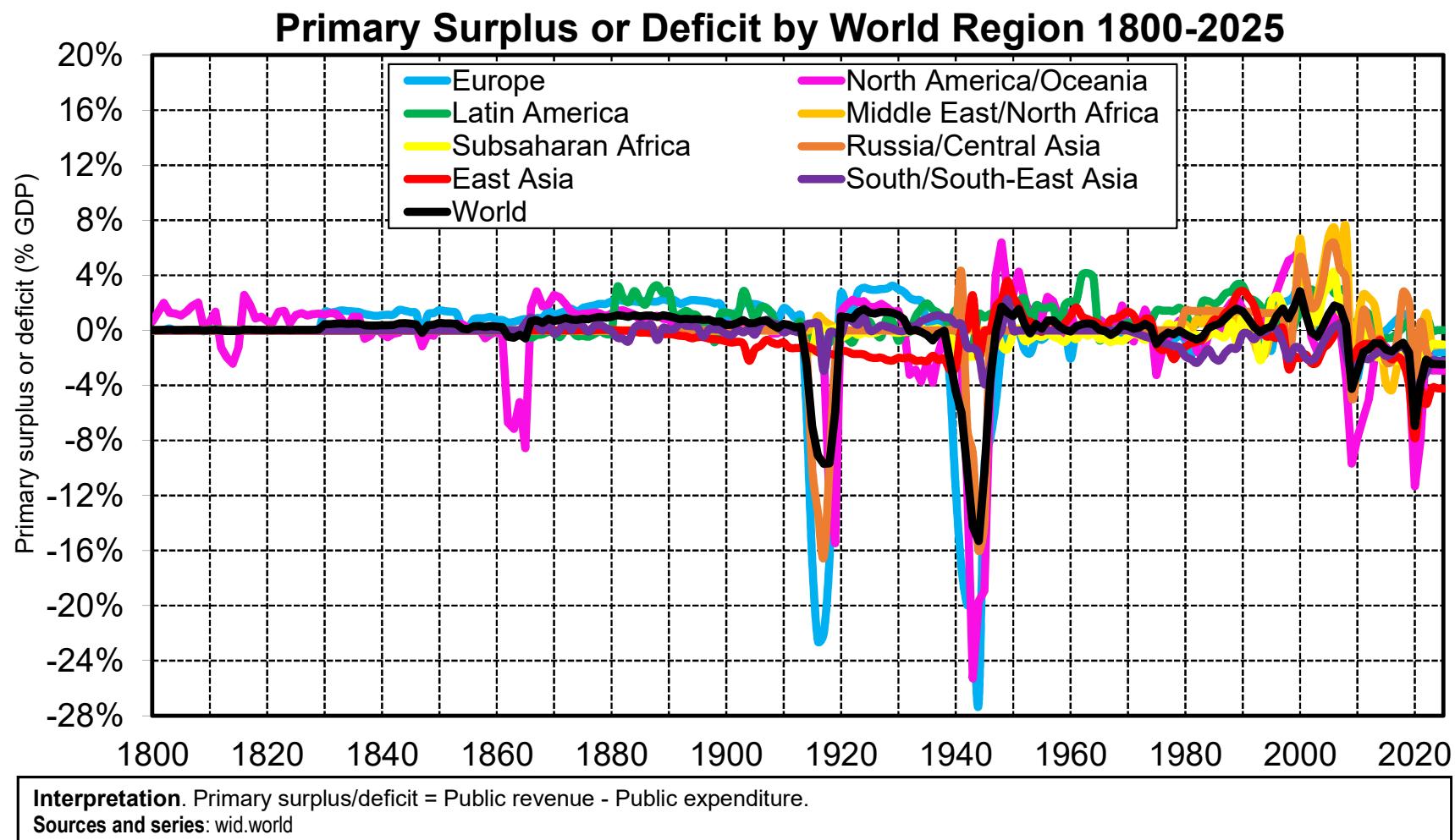


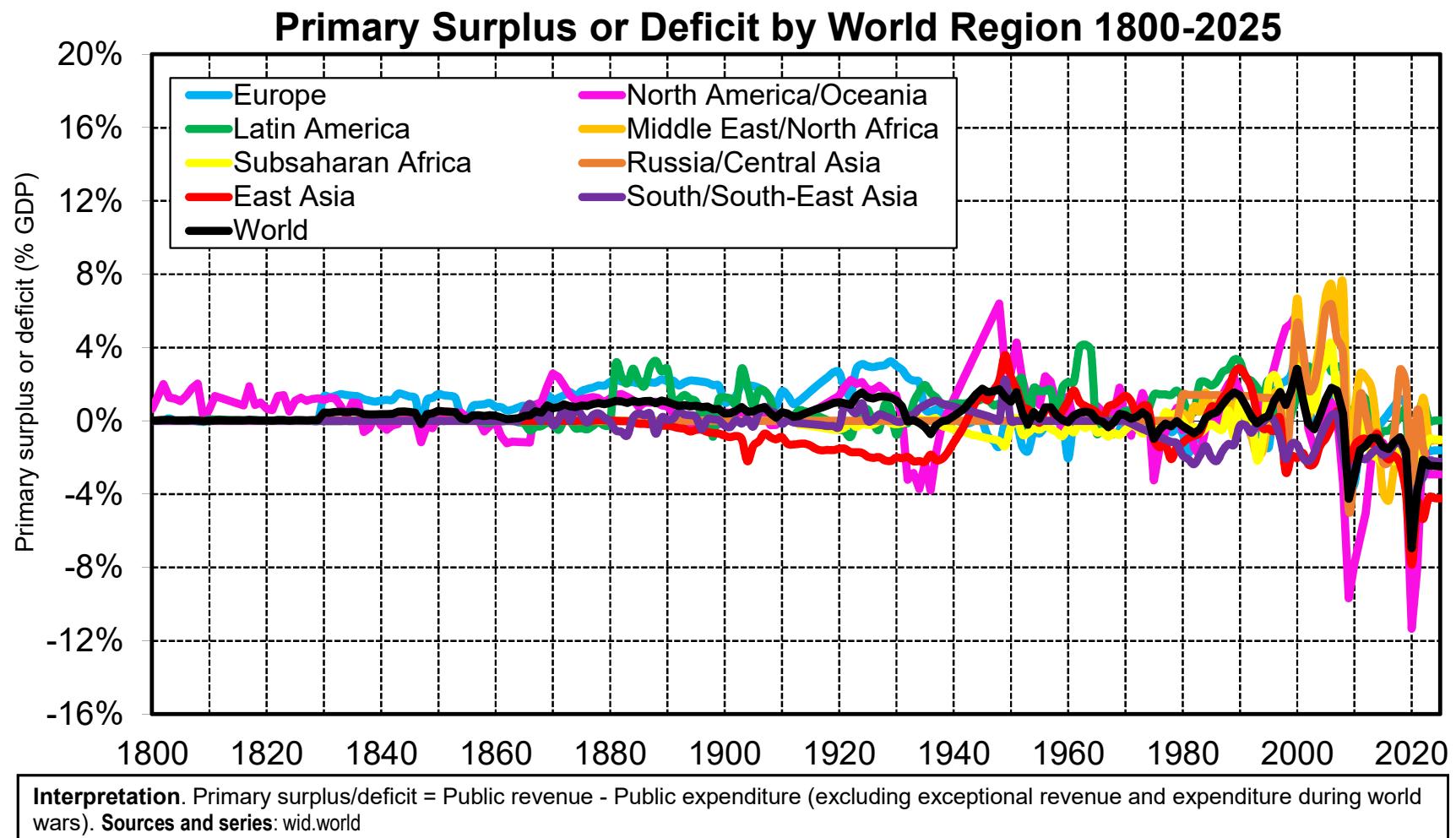
Interpretation. In 2025, total public revenue amounts to about 25% of GDP in East Asia, including 10% for indirect taxes (sales taxes, excises, etc.), 2% for property and wealth taxes (annual taxes on real estate and other property, inheritance taxes, etc.), 2% for personal income taxes (taxes on household income: wages, dividends, etc.), 3% for corporate income taxes (taxes on company profits), 7% for social contributions (employers, employees, self-employed), 0% for other taxes and 1% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world

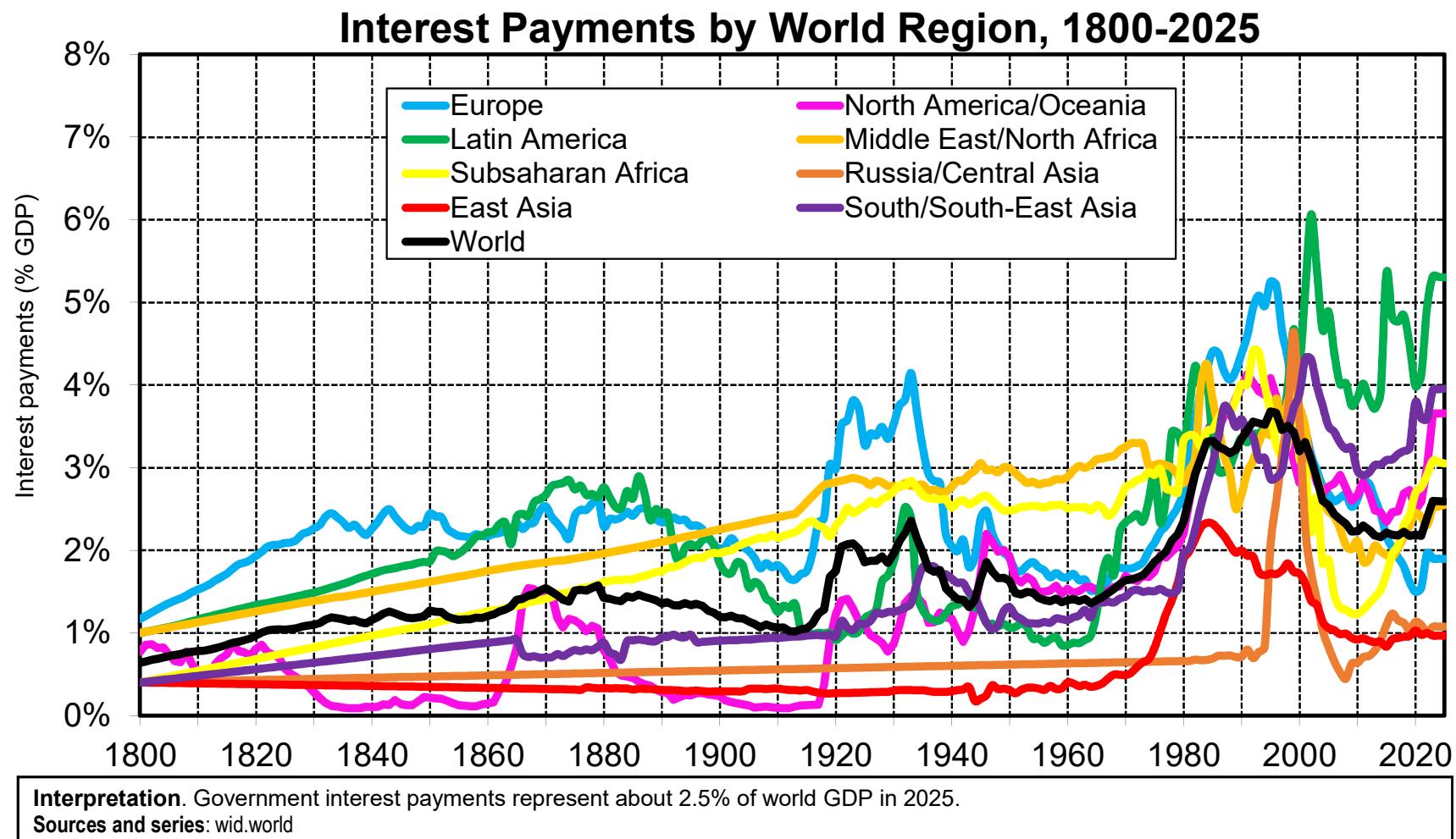
The (limited) rise of the fiscal State: South & South-East Asia

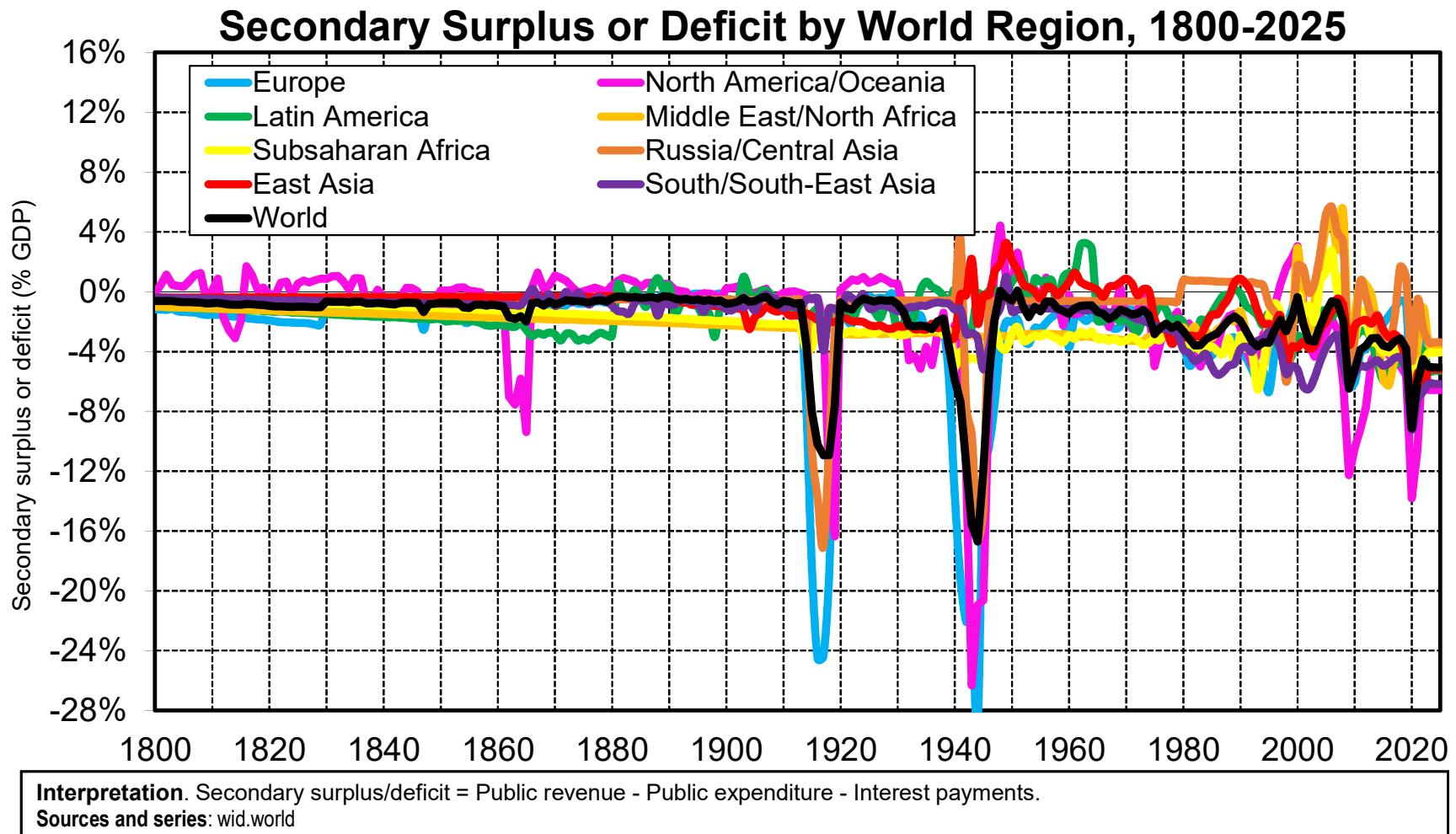


Interpretation. In 2025, total public revenue amounts to about 21% of GDP in South & South-East Asia, including 8% for indirect taxes (sales taxes, excises, etc.), 0% for property & wealth taxes (annual taxes on real estate & other property, inheritance taxes, etc.), 3% for personal income taxes (taxes on household income: wages, dividends, etc.), 2% for corporate income taxes (taxes on company profits), 0% for social contributions (employers, employees, self-employed), 4% for other taxes and 3% for non-tax revenue (royalties, fines, etc.). **Sources and series:** wid.world

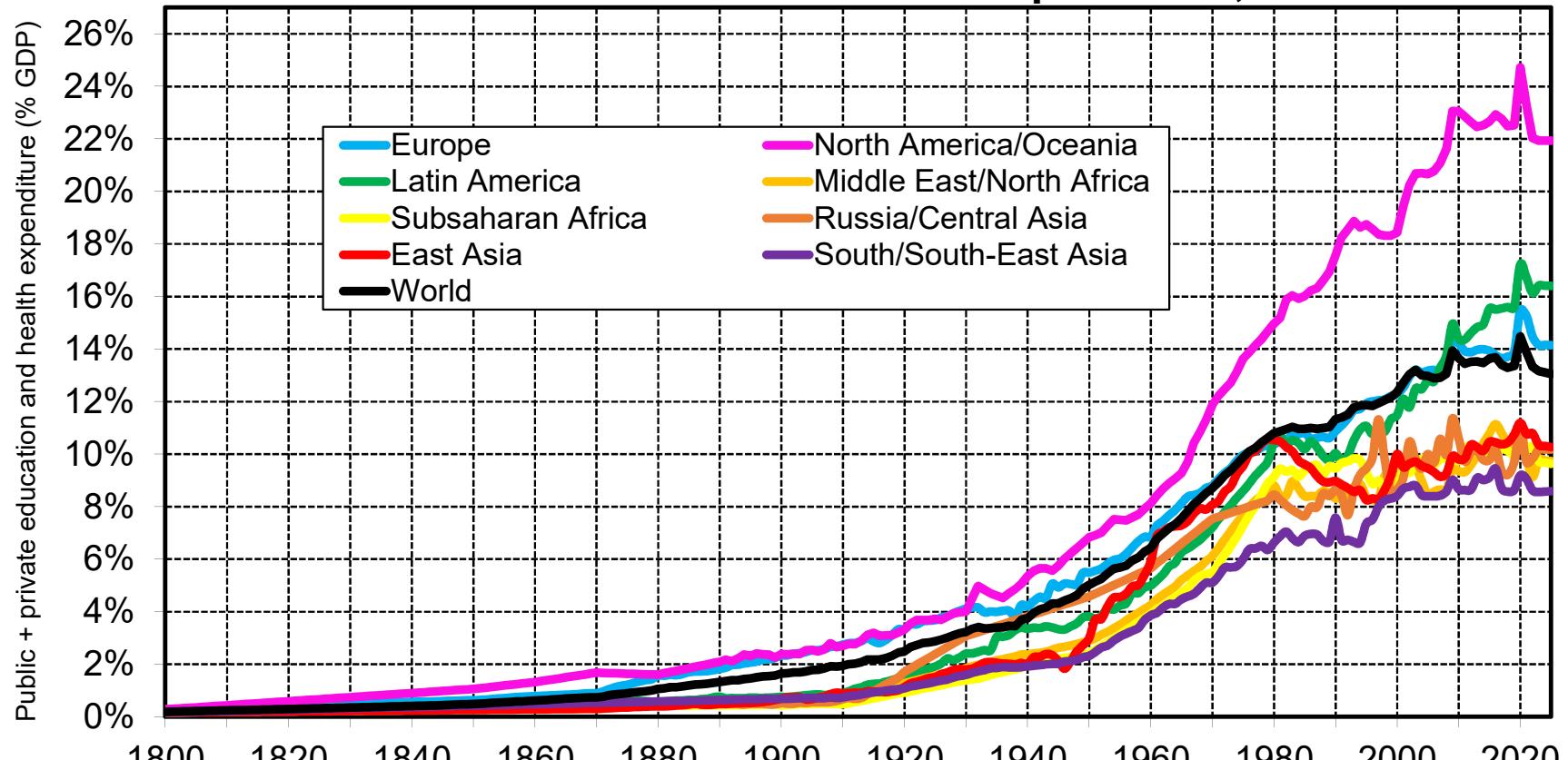




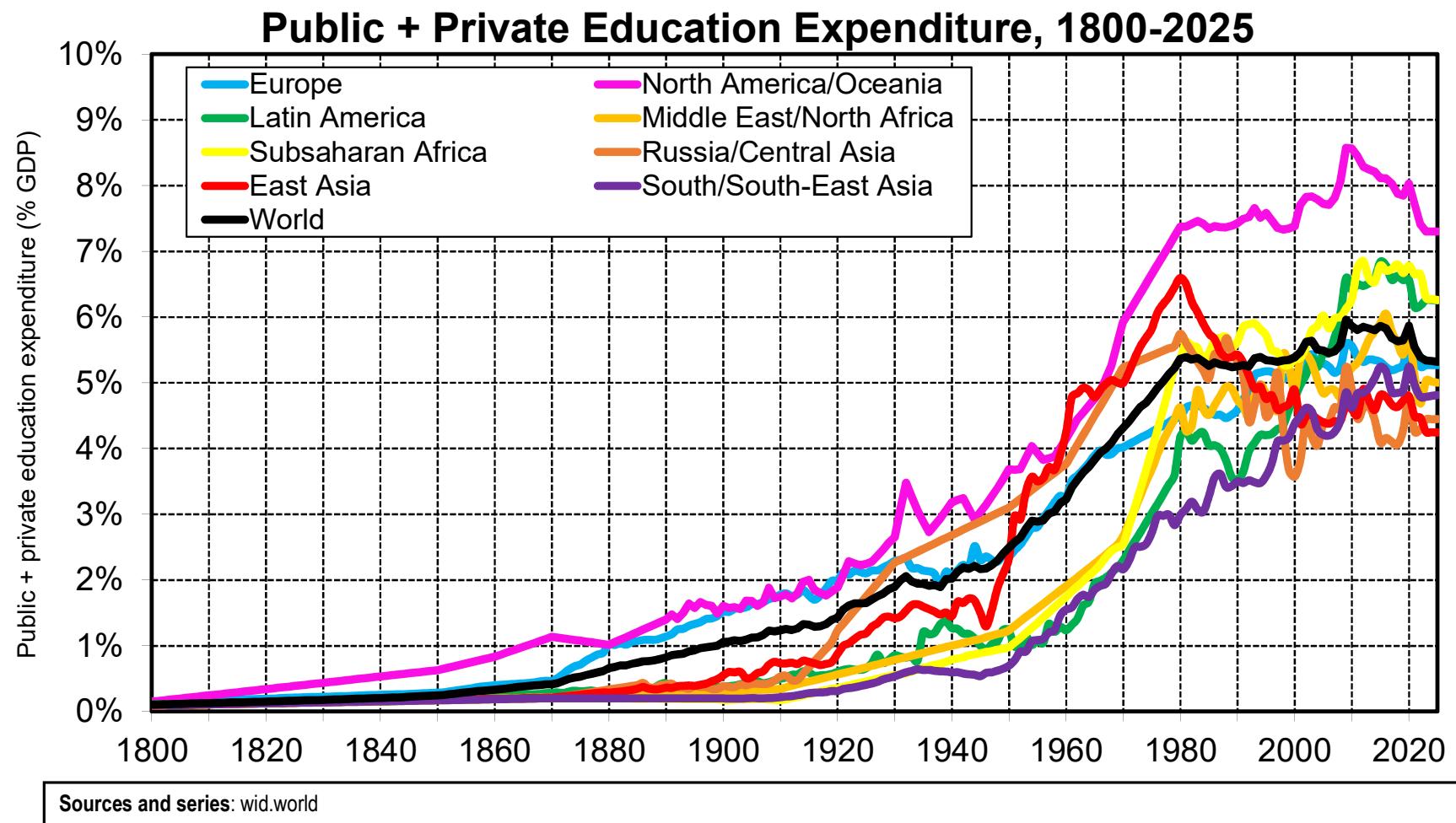


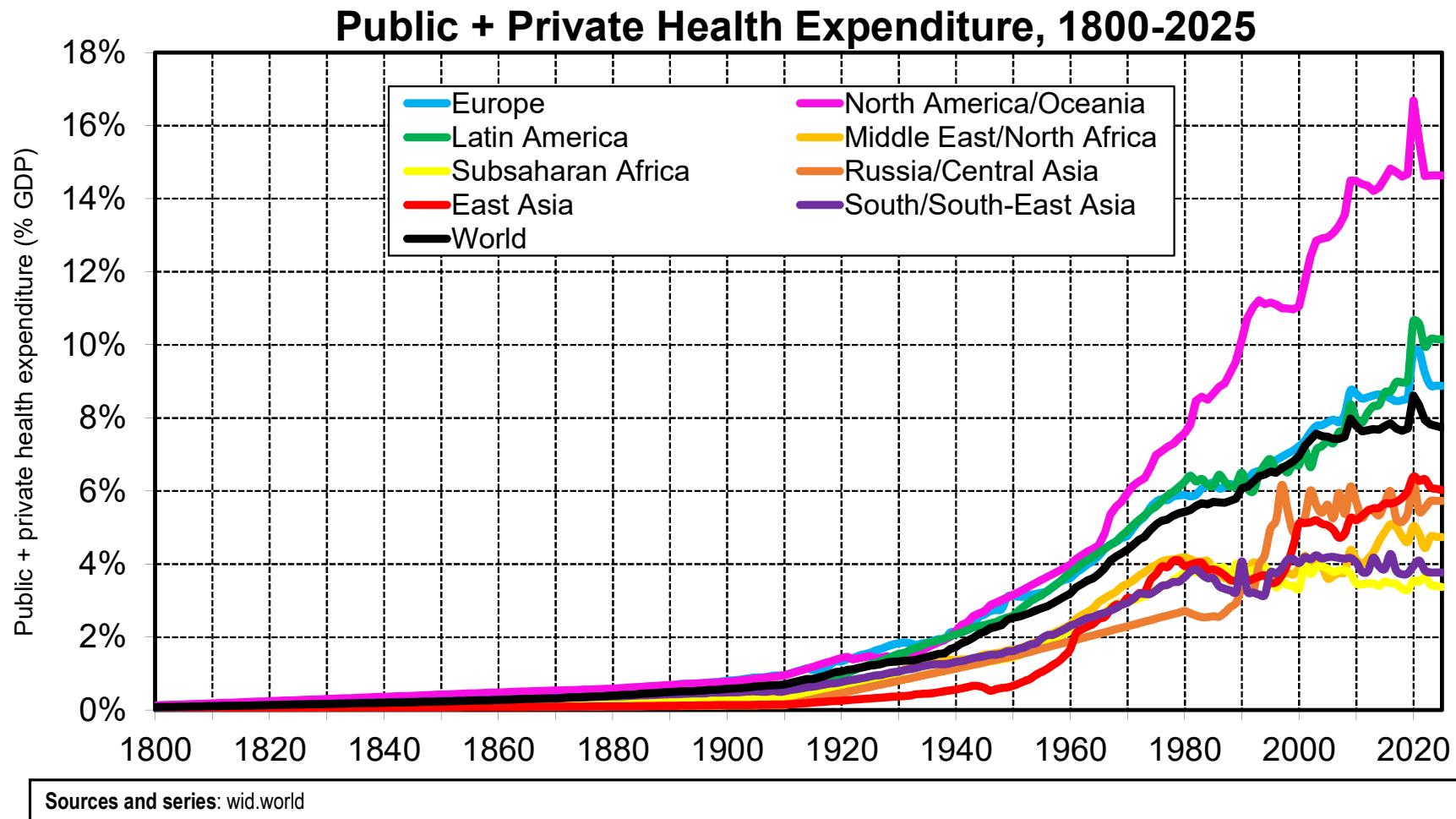


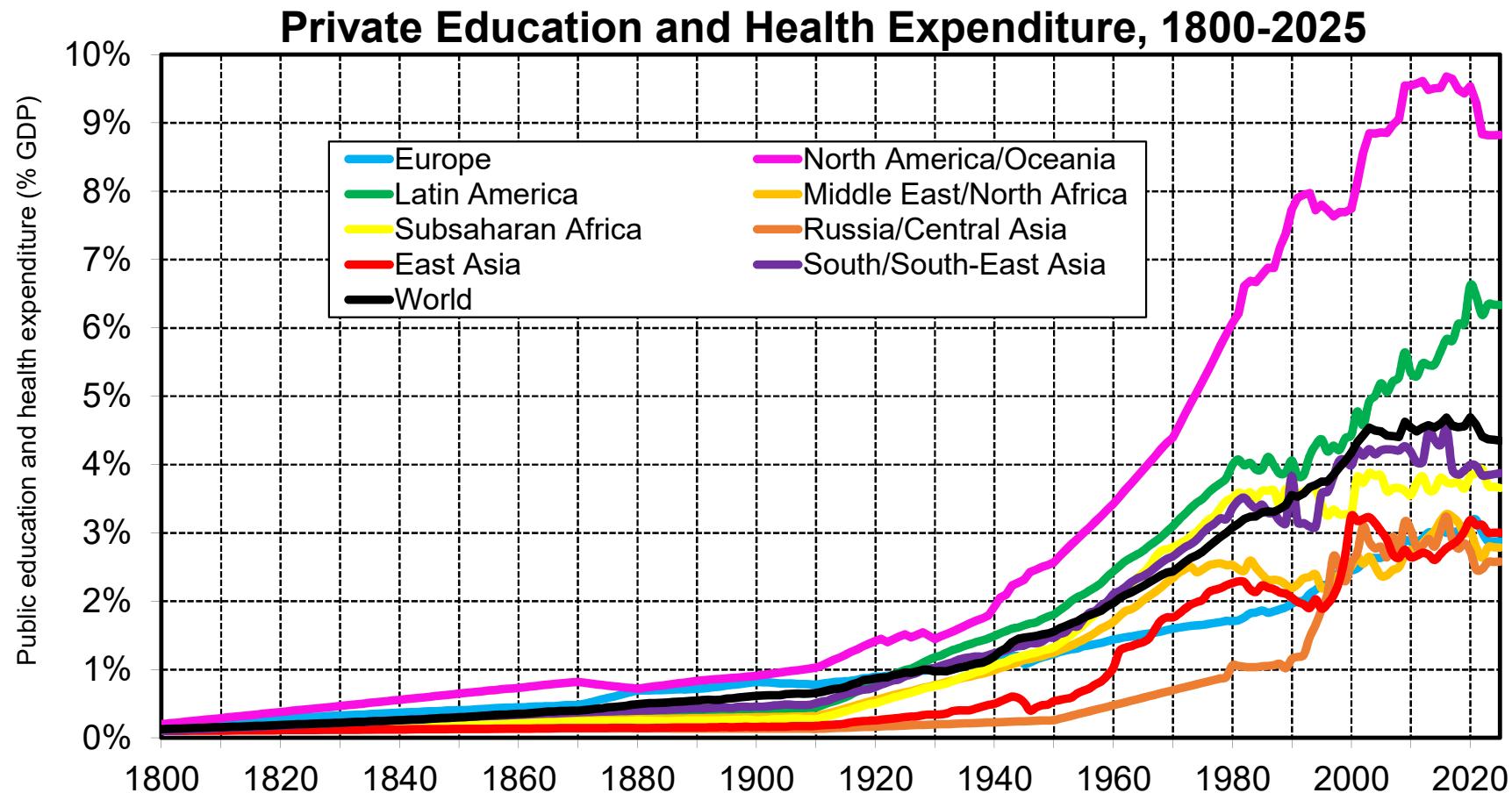
Public + Private Education & Health Expenditure, 1800-2025



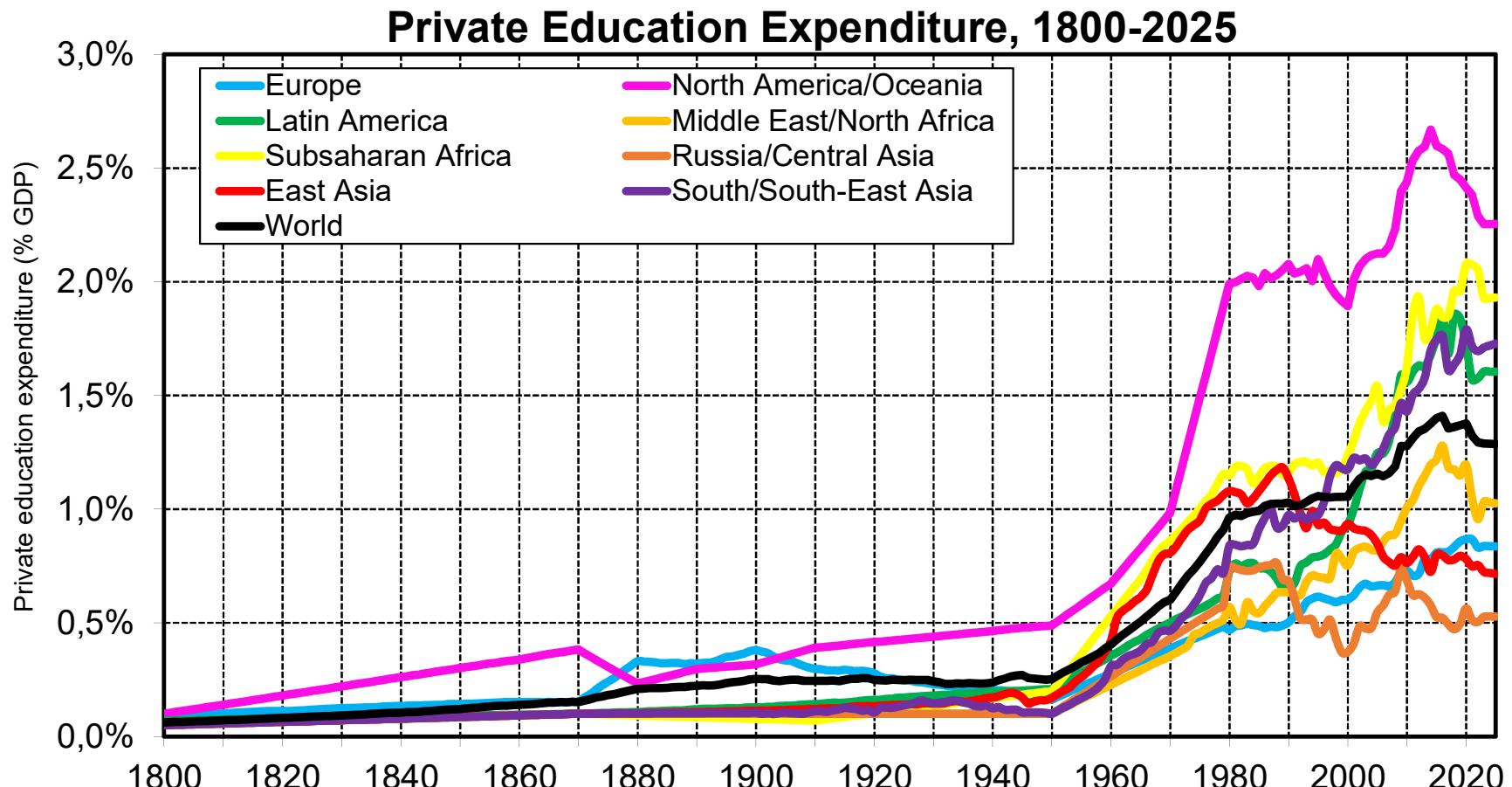
Sources and series: wid.world



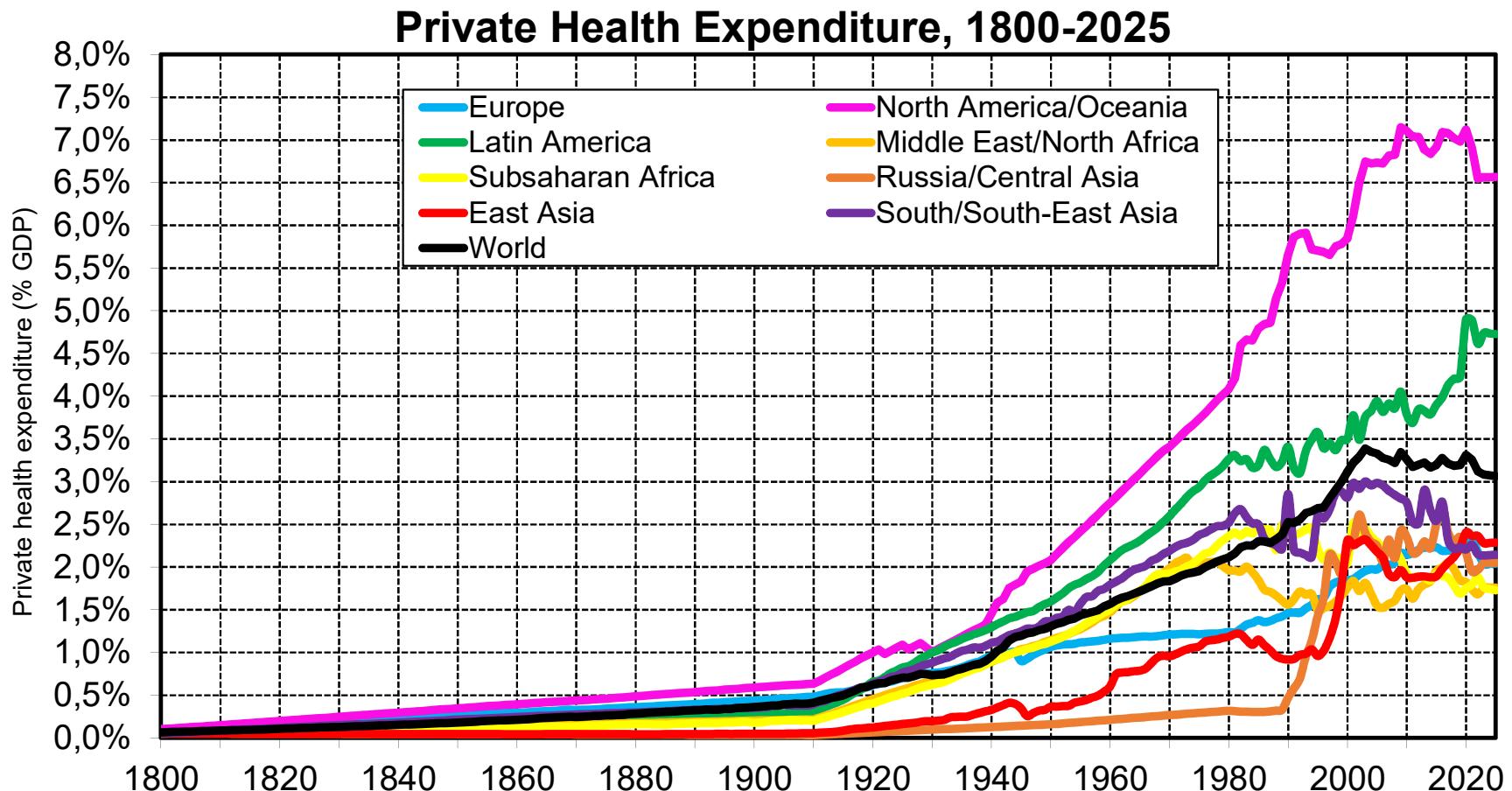




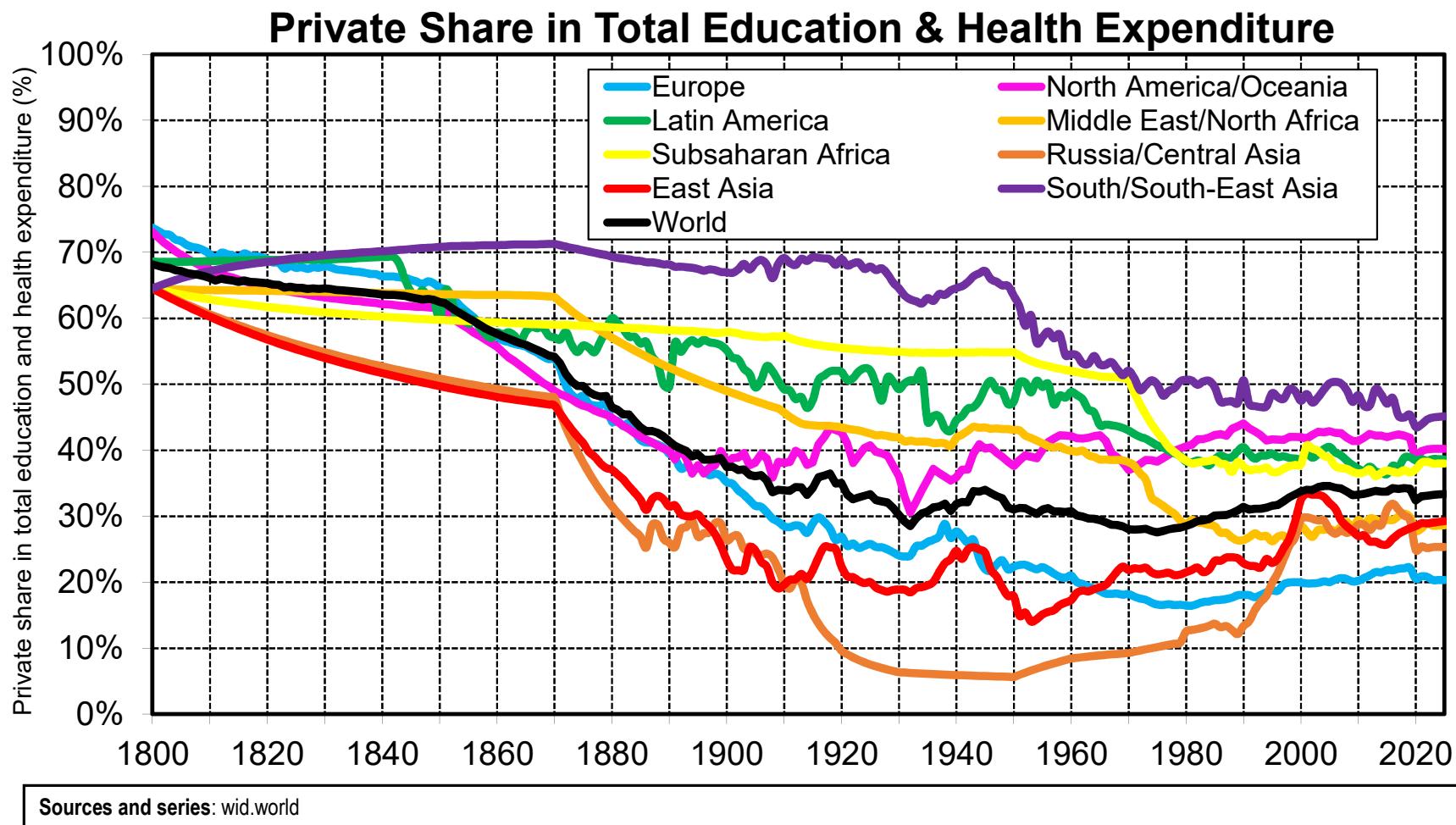
Interpretation. Private education and health expenditure has increased substantially in recent decades and represents about 4.5% of GDP at the global level in 2025, with enormous variations across world regions, from about 9% in North America/Oceania to 6% in Latin America, 4% in South & South-East Asia and Subsaharan Africa and 3% in Europe, East Asia, Russia/Central Asia and Middle East/North Africa. **Sources and series:** wid.world



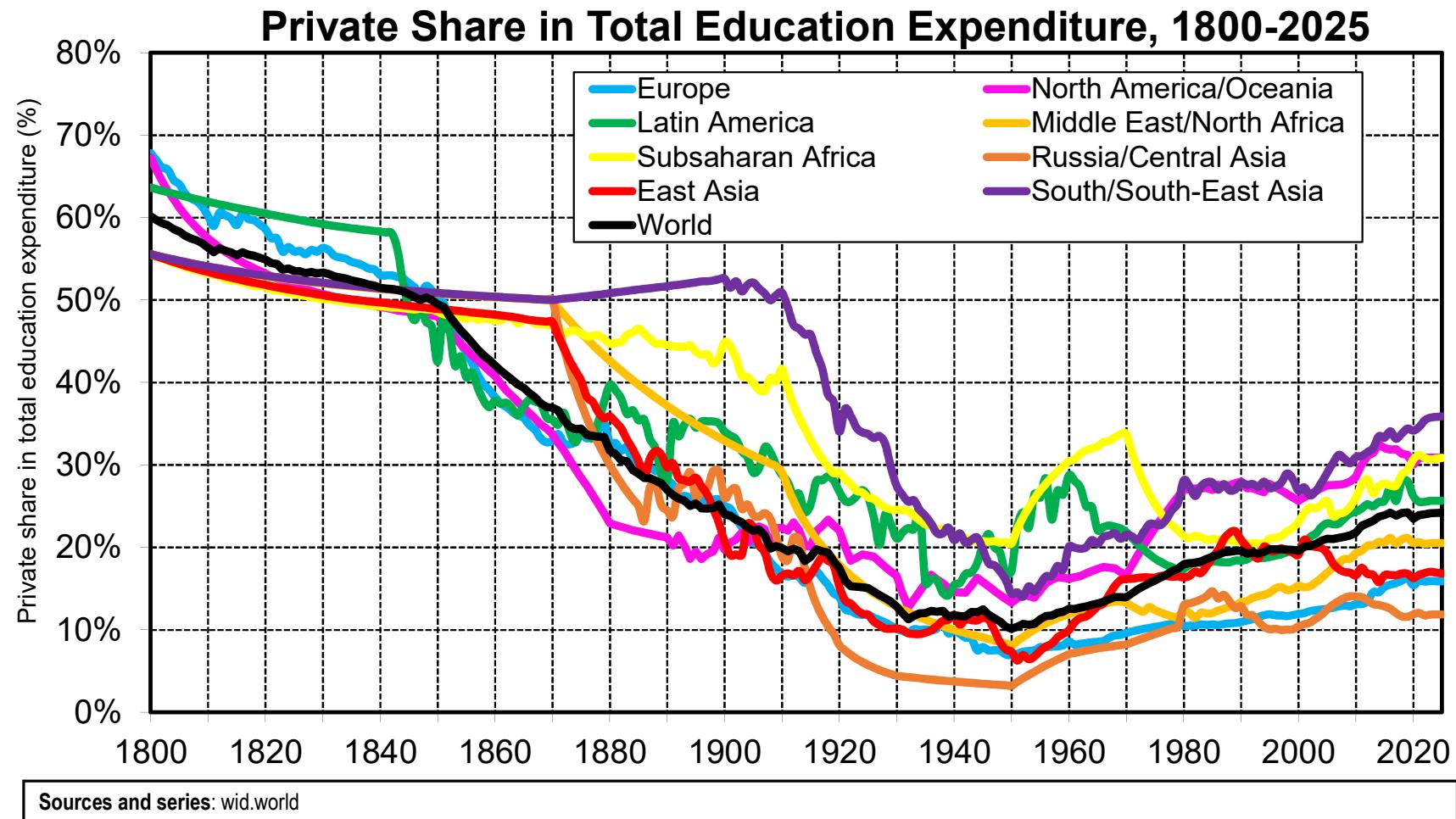
Interpretation. Private education expenditure has increased substantially in recent decades, particularly in North America/Oceania, South & South East Asia, Subsaharan Africa and Latin America. At the global level, they represent 1.3% of GDP in 2025, i.e. about 24% of total public + private education expenditure (5.3% of GDP). **Sources and series:** wid.world



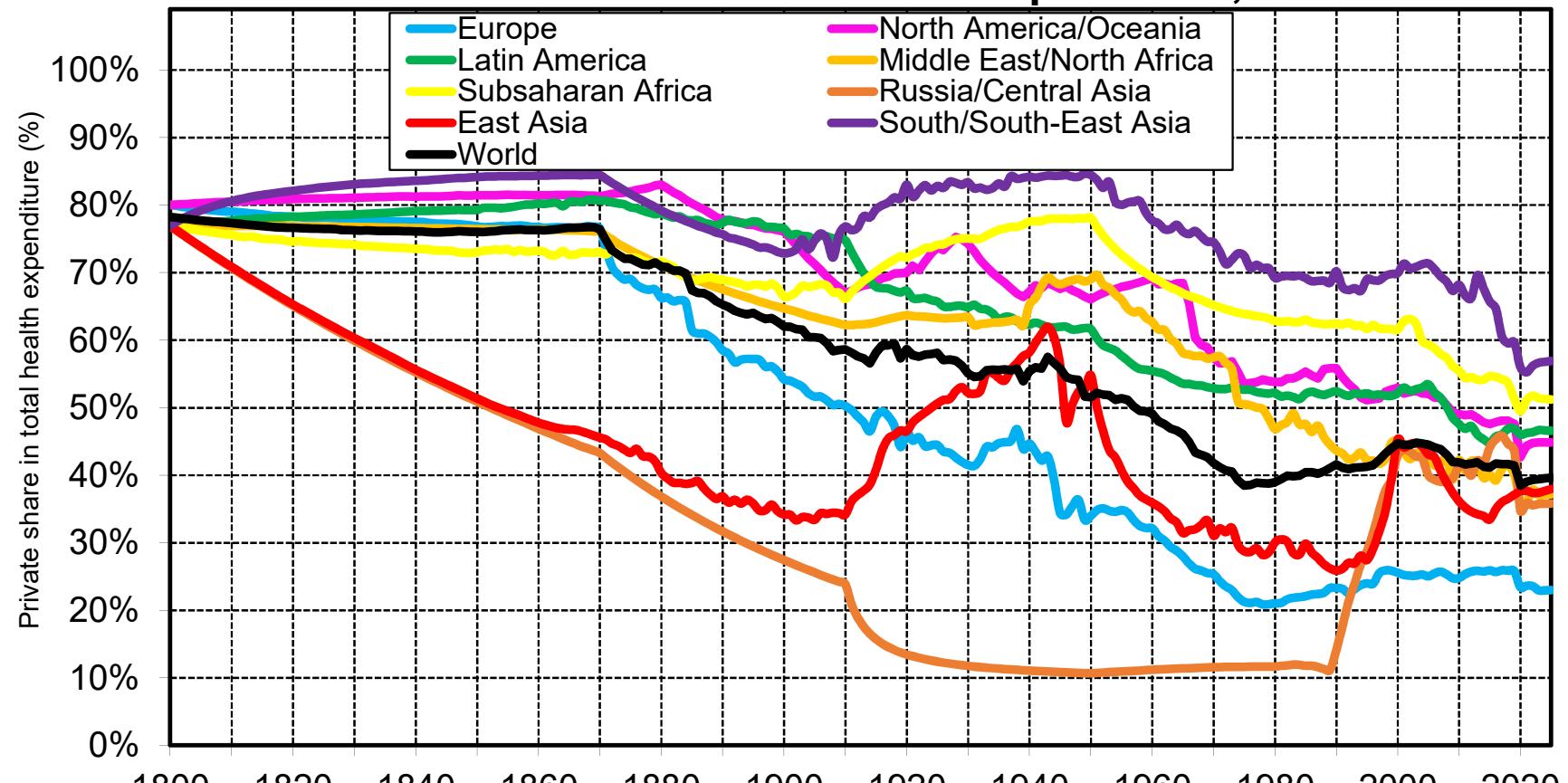
Interpretation. Private health expenditure has increased substantially in recent decades in North America/Oceania, and to a lesser extent in Latin America. At the global level, they represent 3.1% of GDP in 2025, i.e. about 40% of total public + private education expenditure (7.8% of GDP). **Sources and series:** wid.world



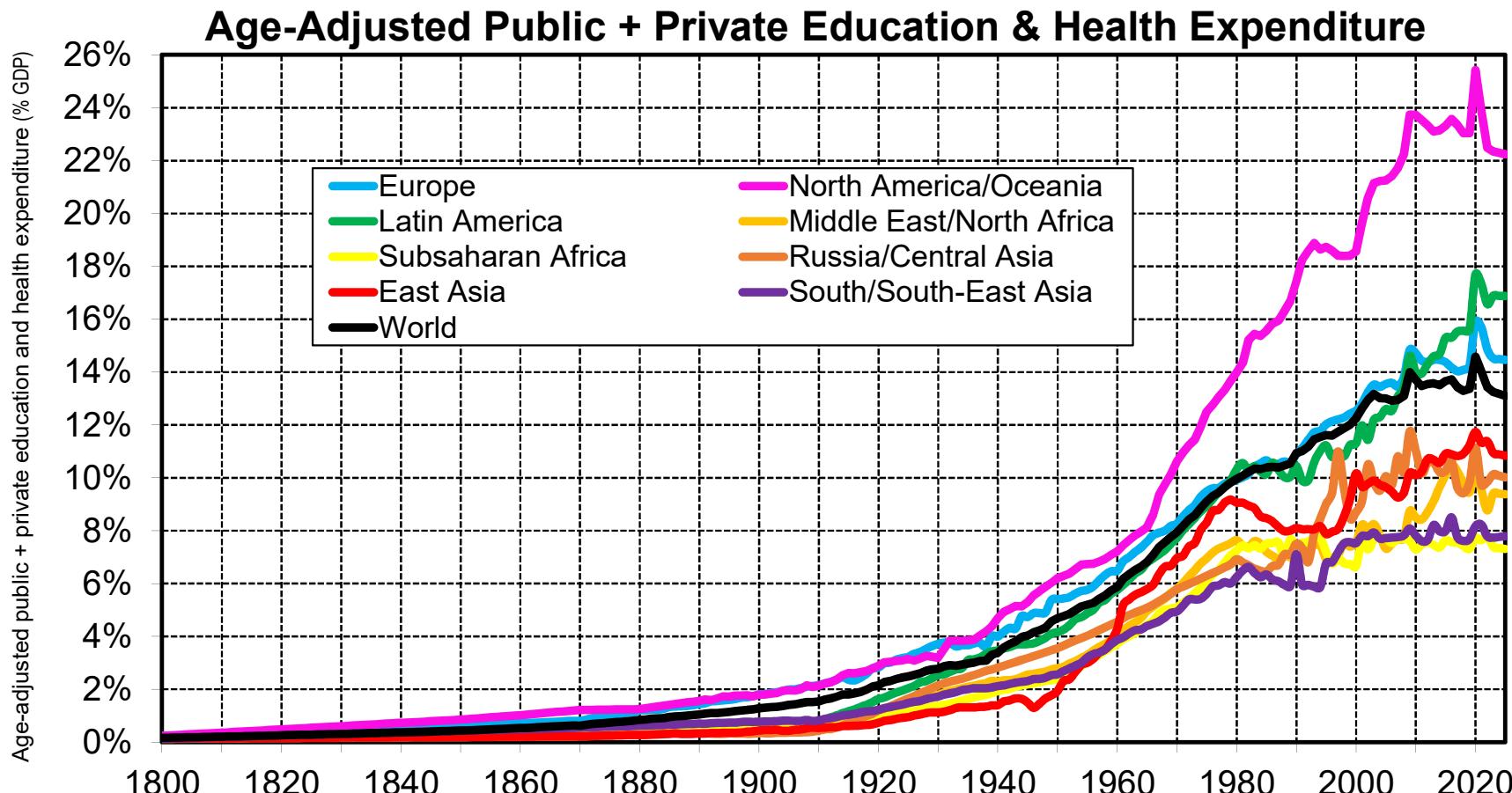
Sources and series: wid.world



Private Share in Total Health Expenditure, 1800-2025

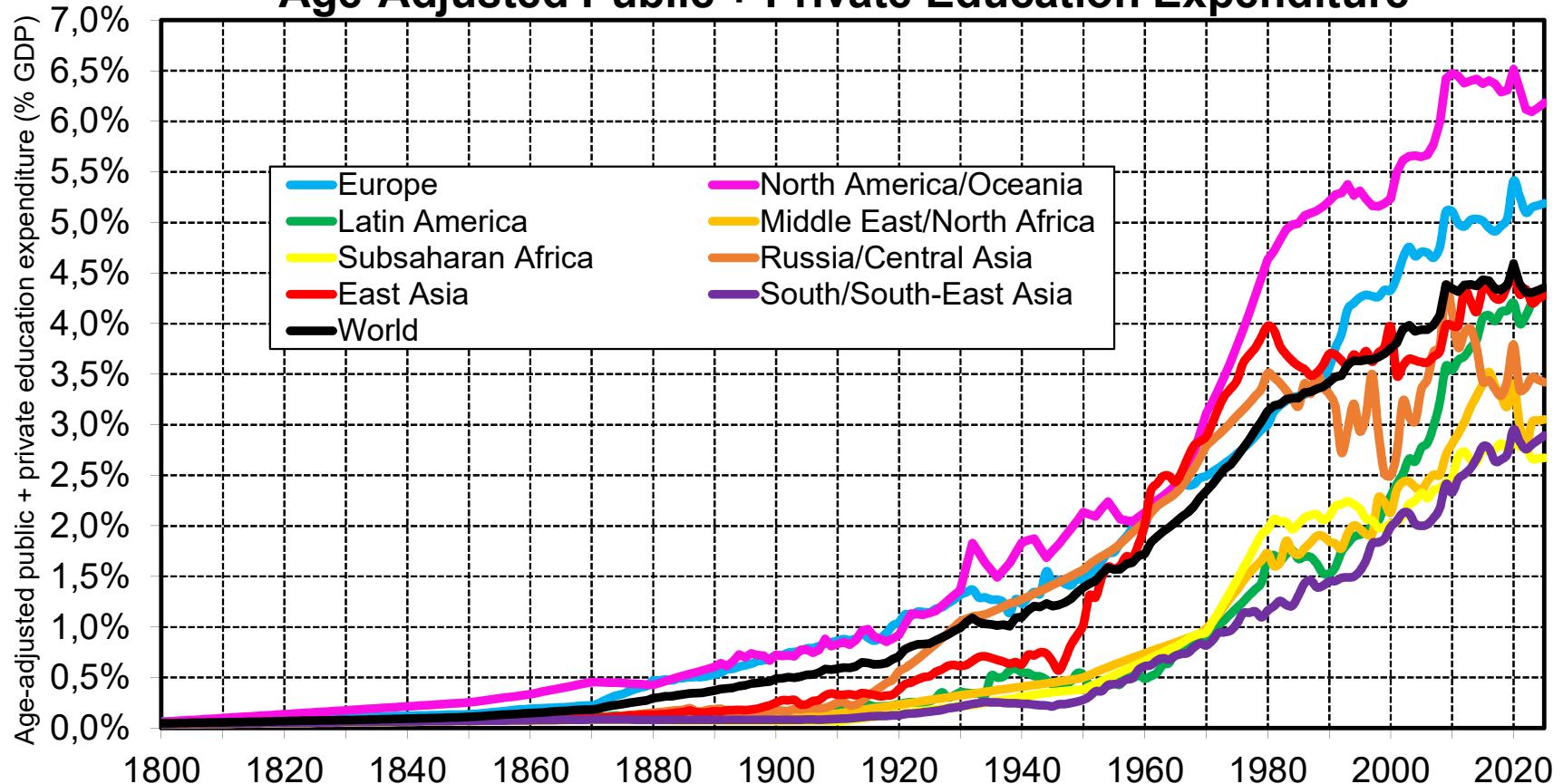


Sources and series: wid.world

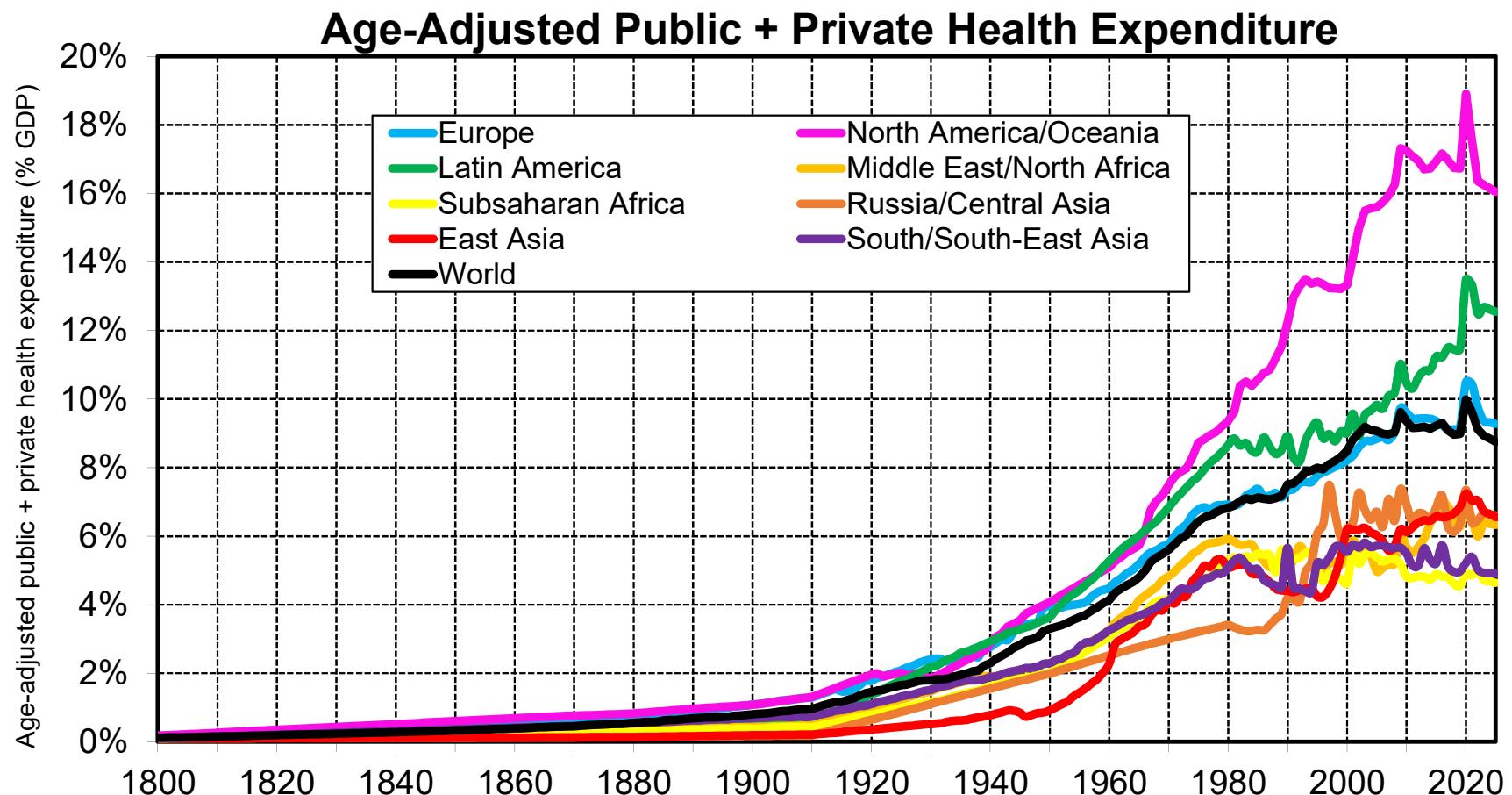


Interpretation. Total age-adjusted public and private education and health expenditure has increased from less than 1% of GDP before 1900 to about 14% of GDP in 2025 at the global level, with large gaps between regions, from about 8% of GDP in South & South-East Asia and Subsaharan Africa to about 23% in North America/Oceania. **Sources and series:** wid.world

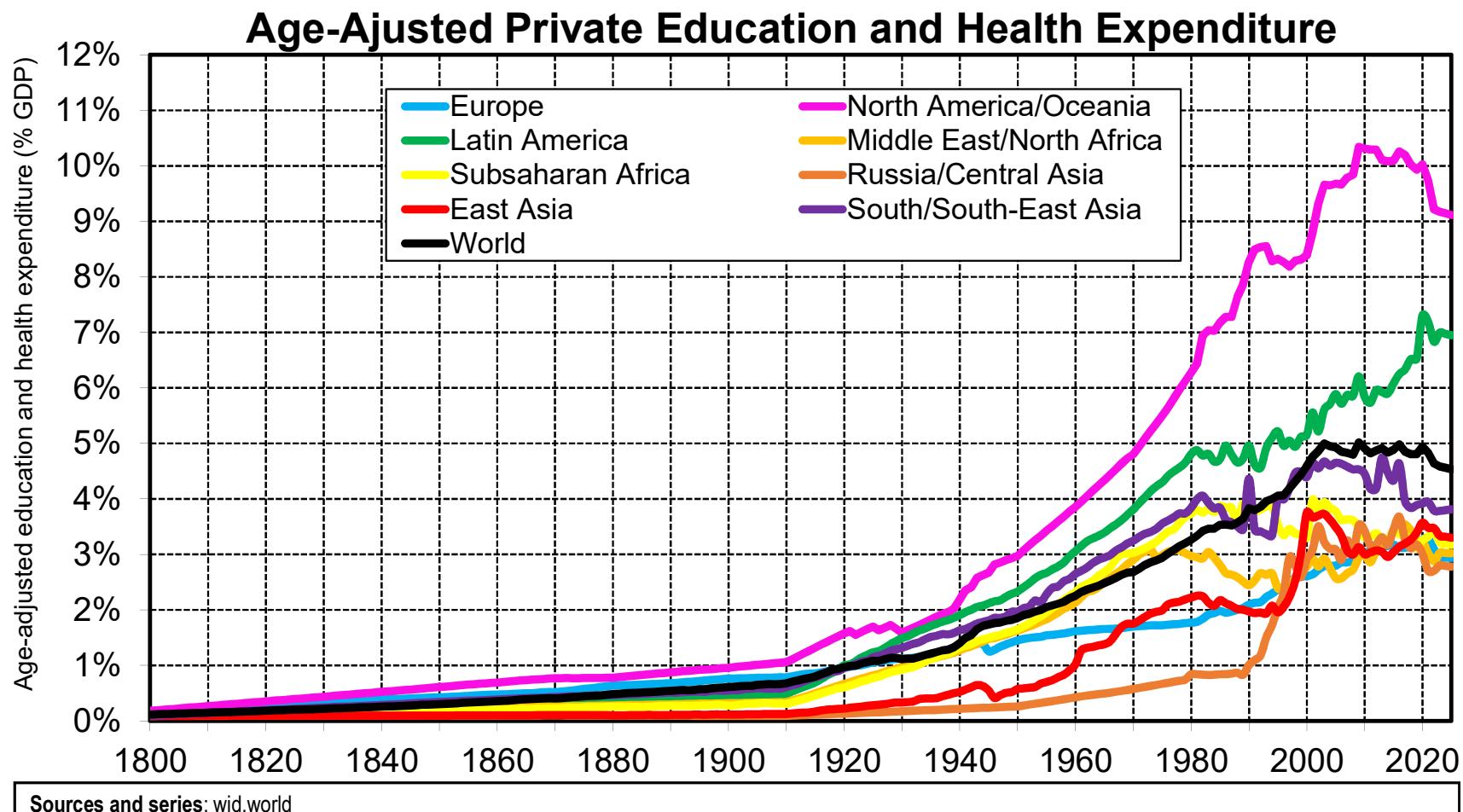
Age-Adjusted Public + Private Education Expenditure

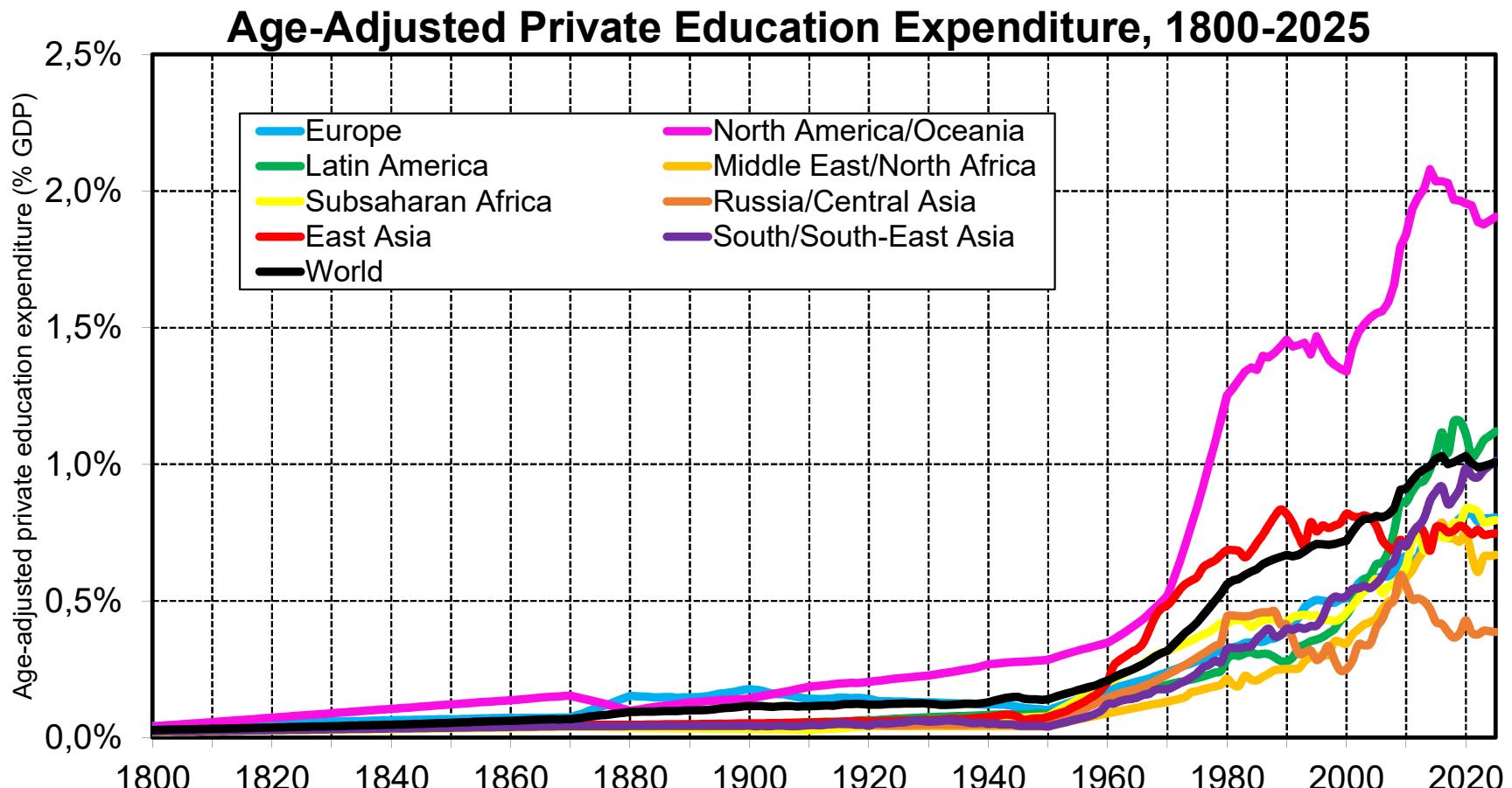


Interpretation. Total age-adjusted public and private education expenditure has increased from less than 1% of GDP before 1900 to about 4.5% of GDP in 2025 at the global level, with large gaps between regions, from about 2.5% of GDP in South & South-East Asia and Subsaharan Africa to about 6-6.5% in North America/Oceania. **Sources and series:** [wid.world](#)

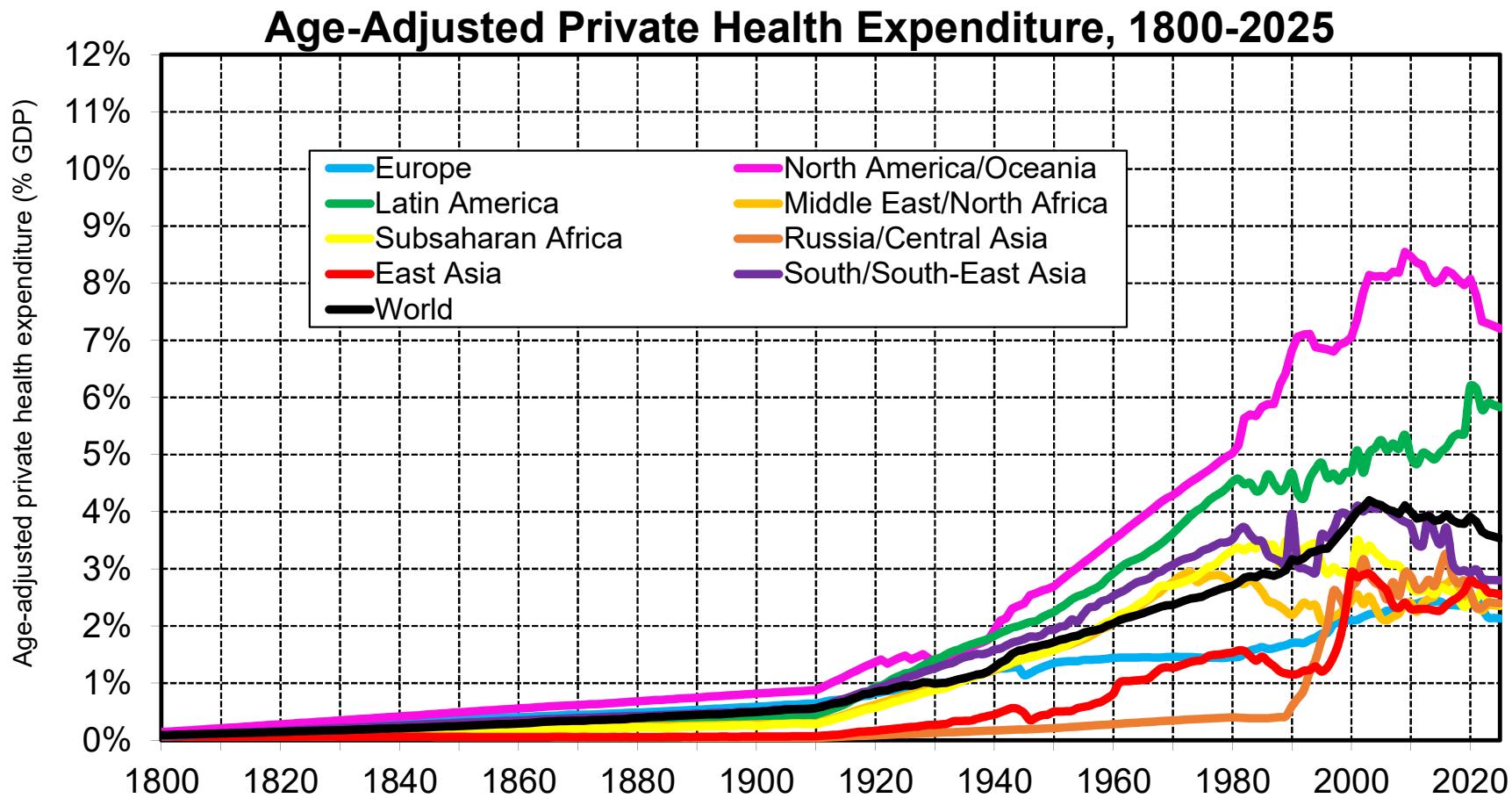


Interpretation. Total age-adjusted public and private health expenditure has increased from less than 1% of GDP before 1900 to about 9% of GDP in 2025 at the global level, with large gaps between regions, from about 4-5% of GDP in South & South-East Asia and Subsaharan Africa to about 16% in North America/Oceania. **Sources and series:** wid.world

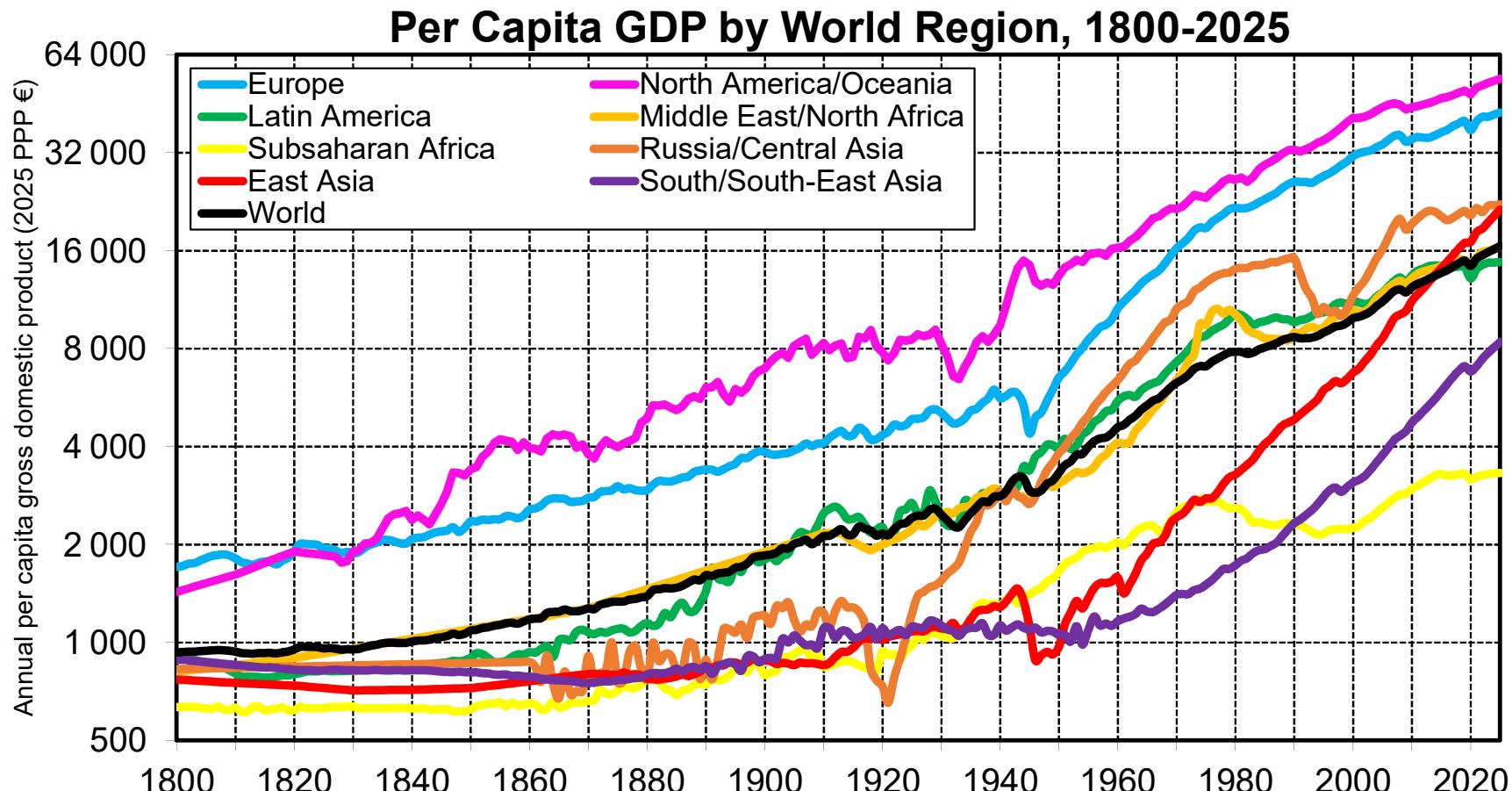




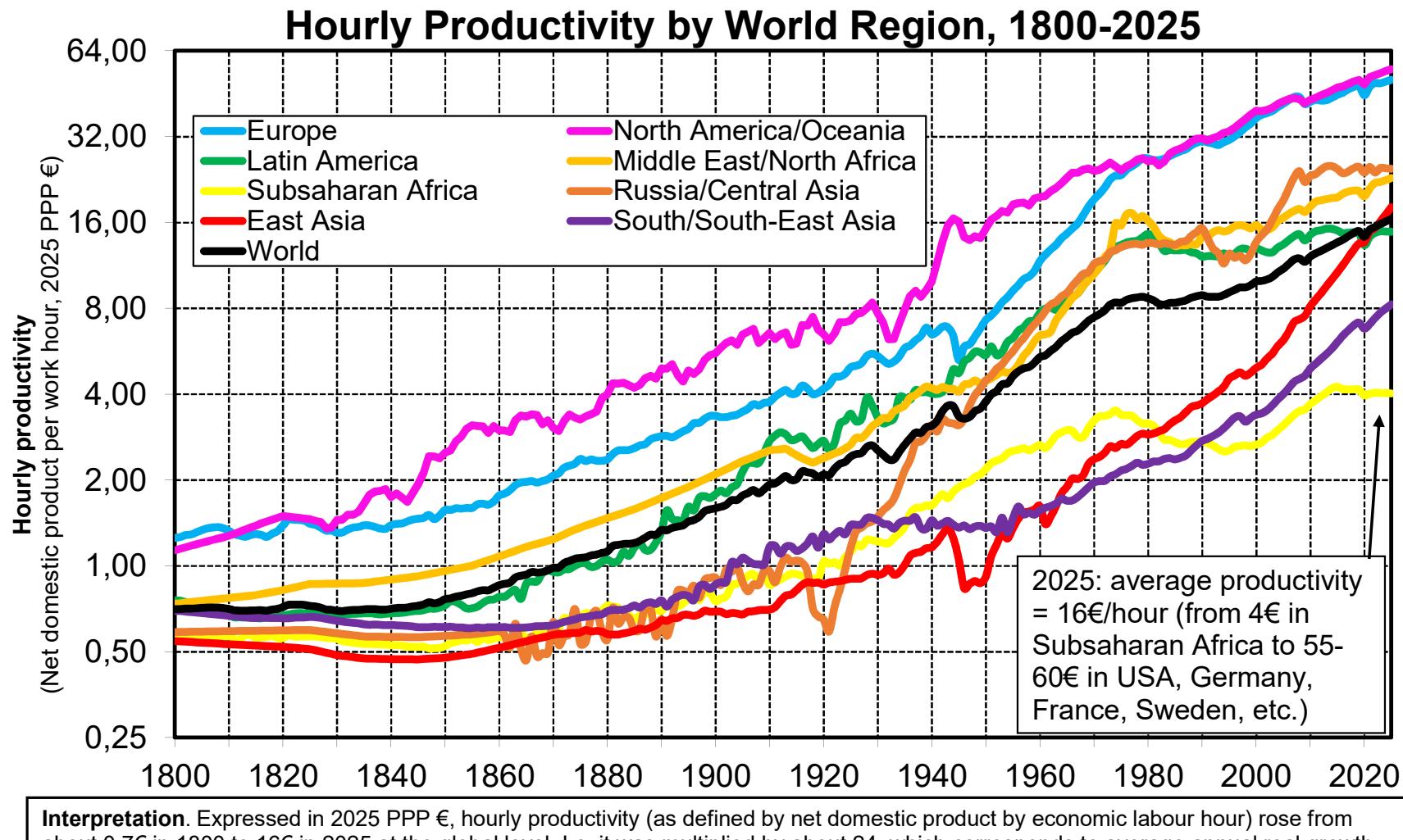
Interpretation. Adjusting for the age structure, i.e. assuming that the share of school-age population (0-to-24-year-old) is equal to 25% in all countries, private education expenditure varies from about 0.5% of GDP in Russia/Central Asia to over 2% of GDP in North America/Oceania. **Sources and series:** wid.world

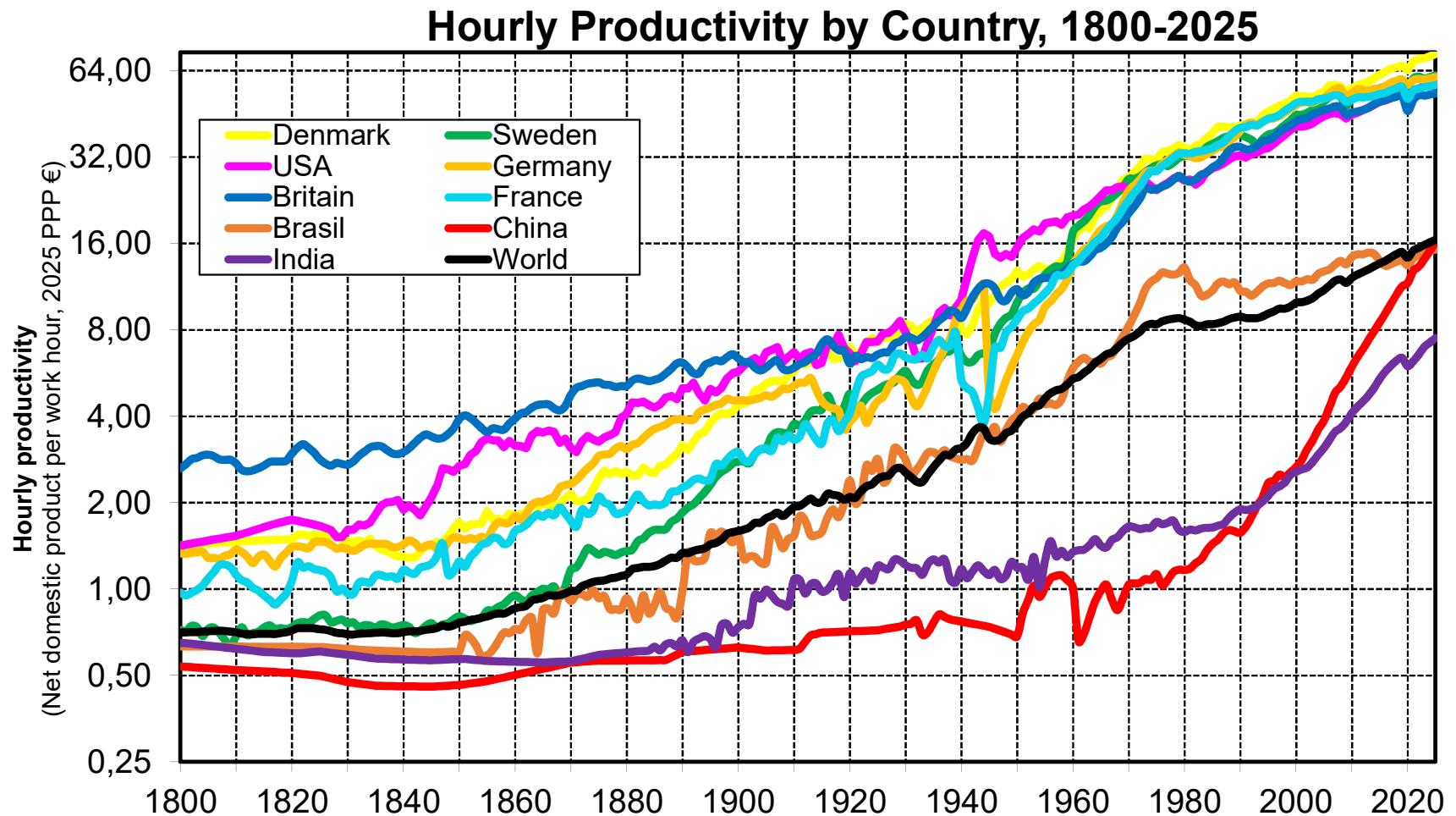


Interpretation. Adjusting for the age structure, i.e. assuming that the share of old-age population (65-year-old+) is equal to 25% in all countries (and taking into account that average per capita health expenditure is about 3 times larger for old-age individuals than for the rest of the population), we find that private health expenditure varies from about 2.5% of GDP in Europe to about 7-8% of GDP in North America/Oceania. **Sources and series:** wid.world

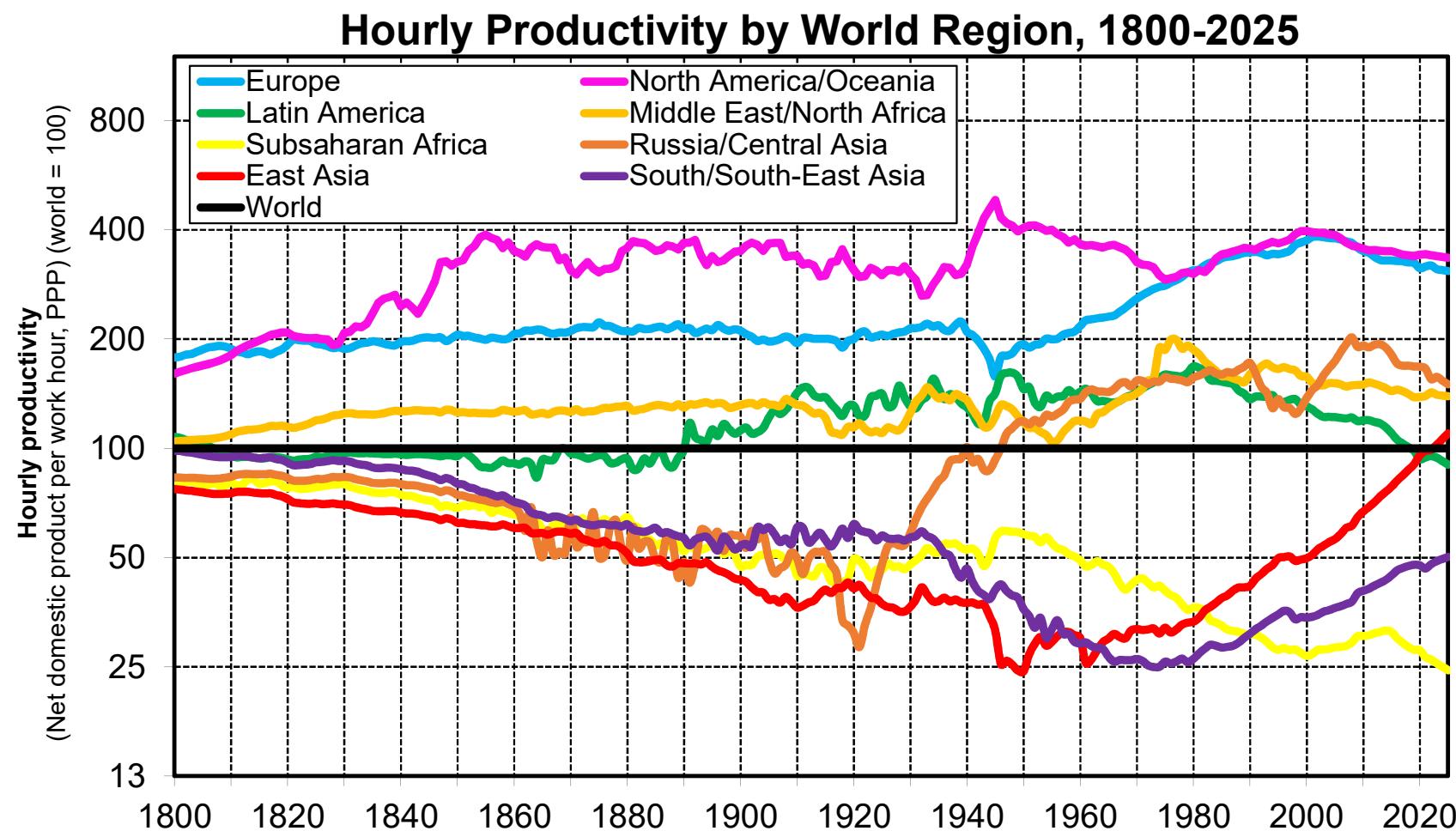


Interpretation. Expressed in 2025 PPP €, annual per capita gross domestic product (GDP) rose from about 900€ in 1800 to 16 000€ in 2025 at the global level. I.e. it was multiplied by about 18, which corresponds to average annual real growth rate of 1,3% per year, with large variations over time and across regions. In 2025, per capita GDP varies between about 3 000€ on average in Subsaharan Africa and about 40 000-50 000€ in Europe and North America/Oceania (i.e. a gap from 1 to 15). **Sources and series:** see wid.world

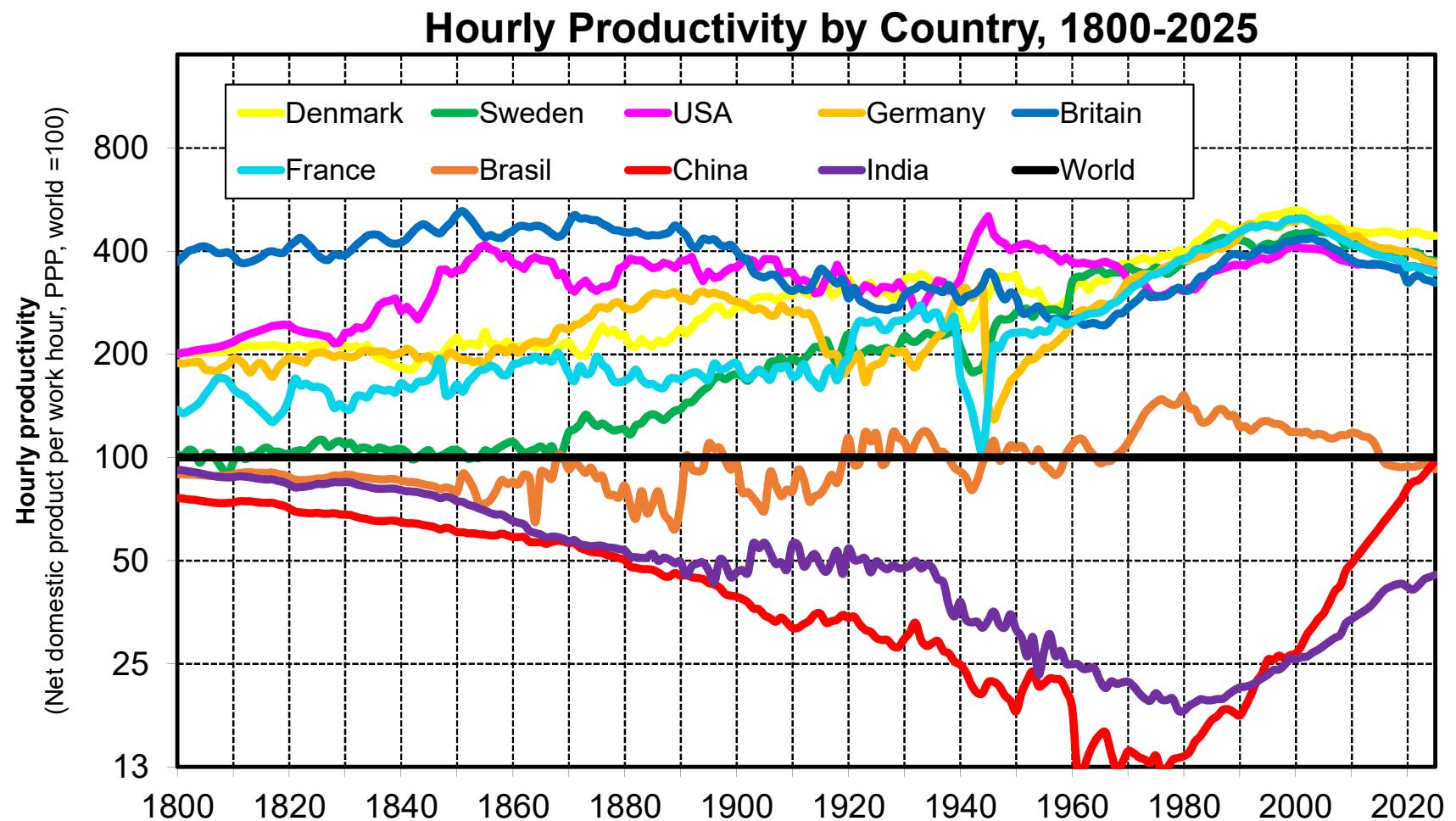




Interpretation. Between 1800 and 1900, Britain was the country in the world with the highest productivity (NDP per work hour), before being replaced by the USA between 1900 and 1970. Since 1970, Europe's highest productivity countries (incl. Denmark, Sweden, Germany, France, Britain) are on par with the USA (around 55-60€/hour, vs 16€ for world average and 7€ in India). **Sources and series:** see [wid.world](#)

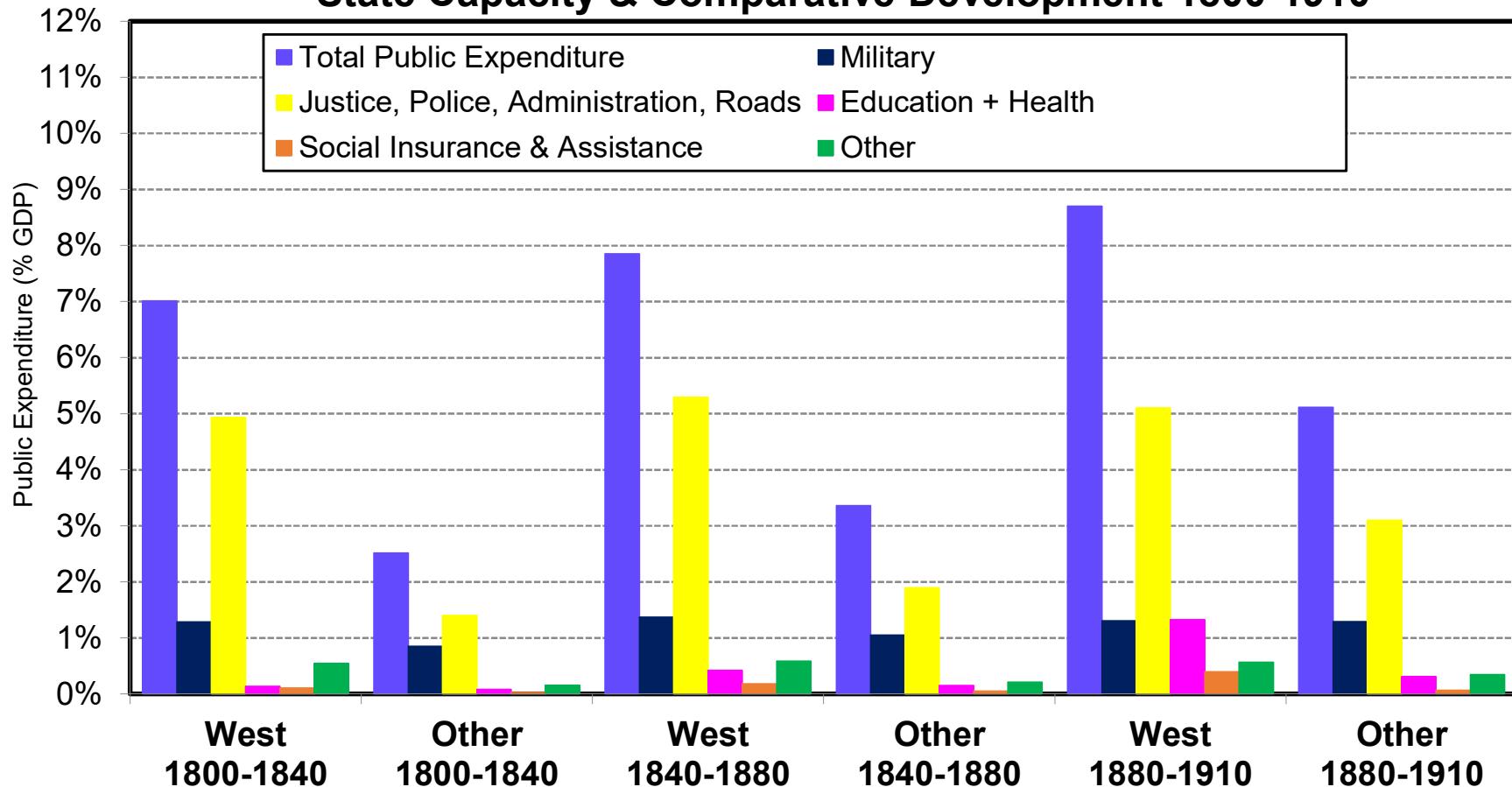


Interpretation. The inequality in hourly productivity (net domestic product per work hour) between world regions rose between 1800 and 1950 and has started to decline since 1950-1960, but with large geographical variations. In 2025, productivity is close to world average in East Asia but only 50% of world average in South & South-East Asia and 25% of world average in Subsaharan Africa. **Sources and series:** see wid.world



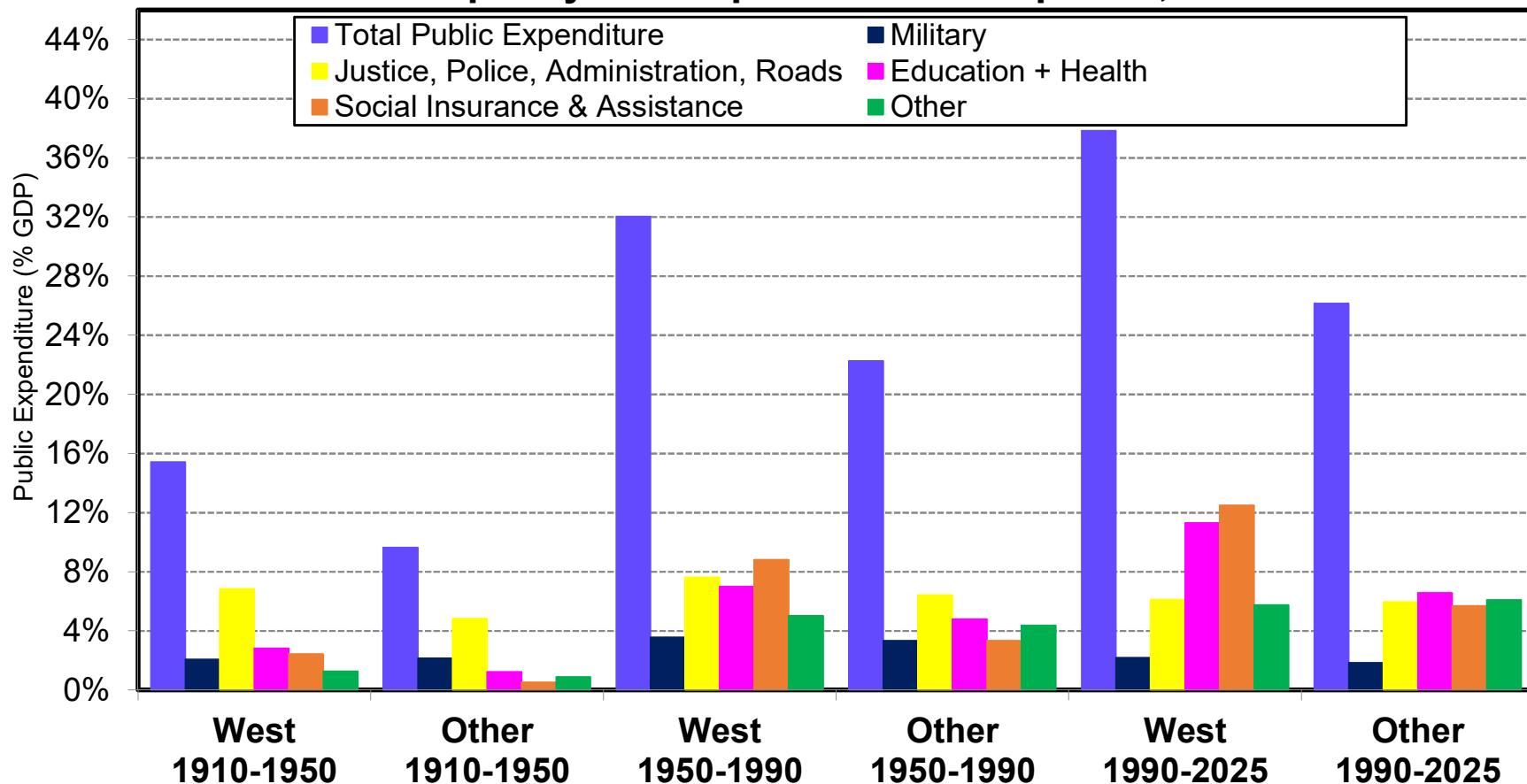
Interpretation. Between 1800 and 1900, Britain was the country in the world with the highest productivity (NDP per work hour), before being replaced by the USA between 1900 and 1970. Since 1970, Europe's highest productivity countries (incl. Denmark, Sweden, Germany, France, Britain) are on par with the USA (around 400% of world average, vs less than 50% in India). **Sources and series:** see wid.world

State Capacity & Comparative Development 1800-1910



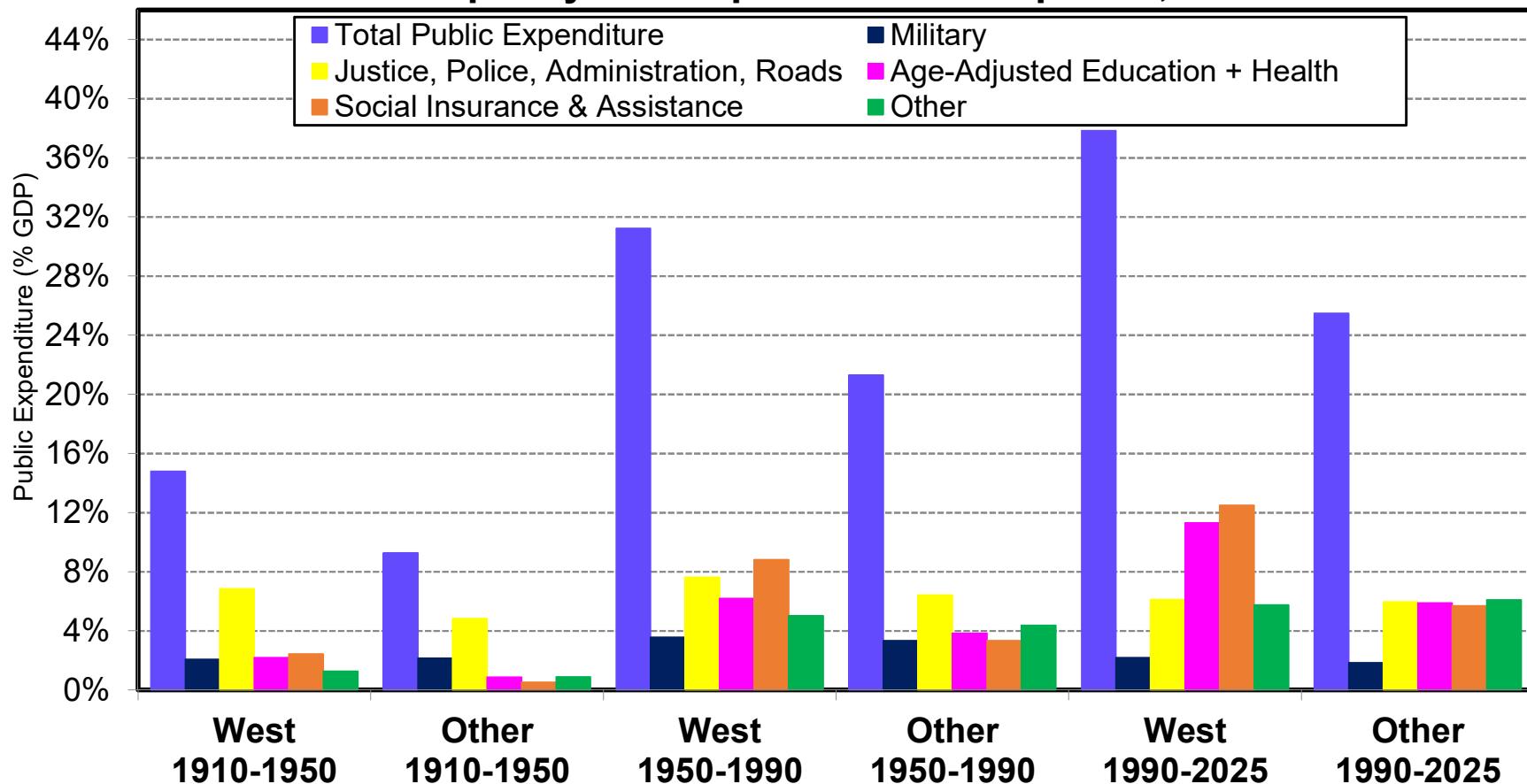
Interpretation. Over the 1800-1910 period, Western countries (Europe/North America/Oceania) have substantially larger public expenditures than other countries (all other regions), mostly due to basic public services (justice, police, administration, roads, etc.). The gap reduces over time but is gradually replaced by a rising gap in human capital (education, health). **Sources and series:** wid.world

State Capacity & Comparative Development, 1910-2025



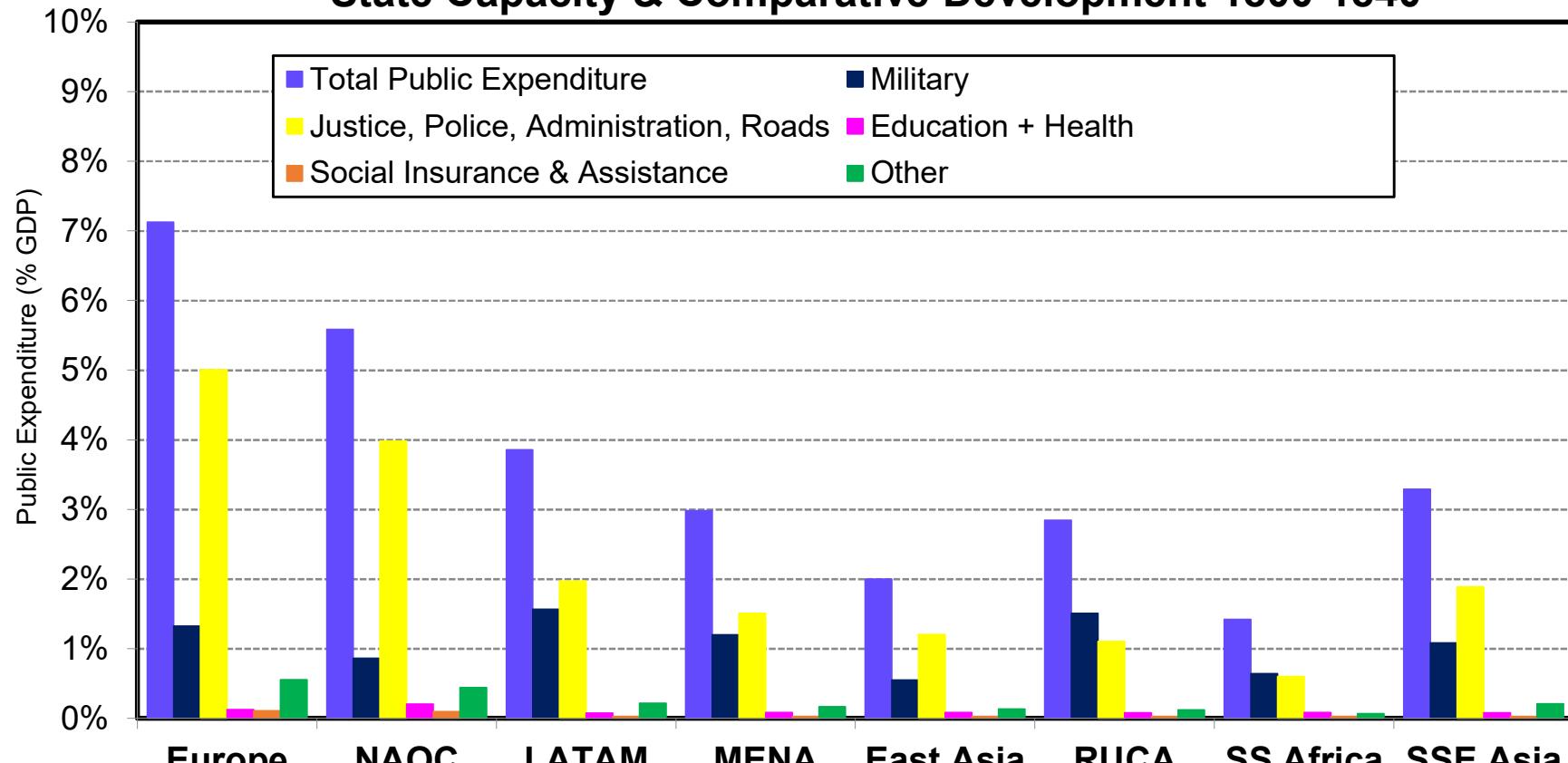
Interpretation. Over the 1910-2025 period, other regions catch up with Western countries in terms of GDP share going to basic public services (justice, police, administration, roads, etc.), but this gap is replaced by an even larger gap in human capital (education, health) & social protection (social insurance & assistance). The gap would be even larger with age-adjusted human capital expenditure. **Sources and series:** wid.world

State Capacity & Comparative Development, 1910-2025



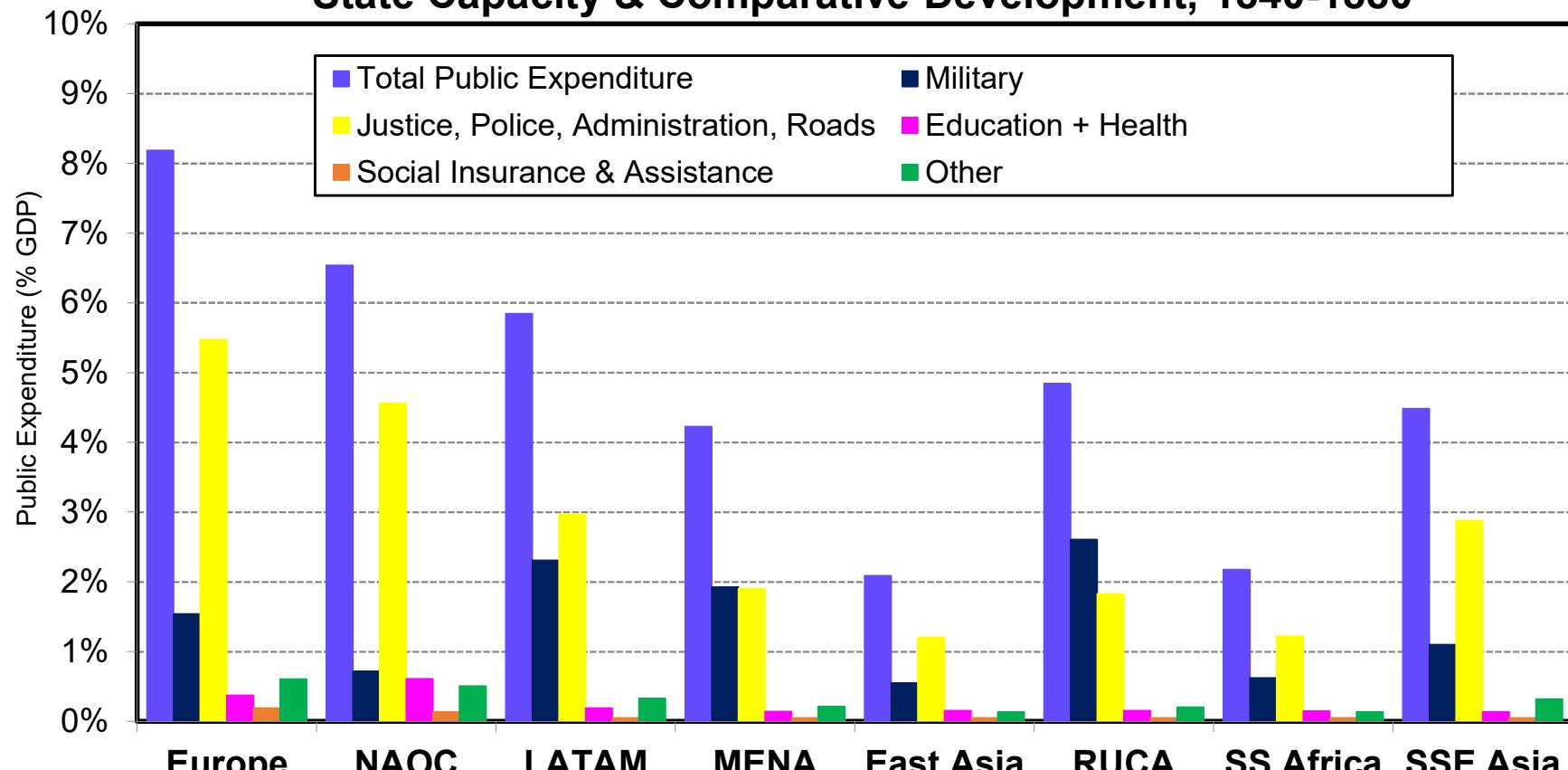
Interpretation. Over the 1910-2025 period, other regions catch up with Western countries in terms of GDP share going to basic public services (justice, police, administration, roads, etc.), but this gap is replaced by an even larger gap in human capital (education, health) & social protection (social insurance & assistance). The gap is even larger with age-adjusted human capital expenditure. Sources and series: [wid.world](#)

State Capacity & Comparative Development 1800-1840



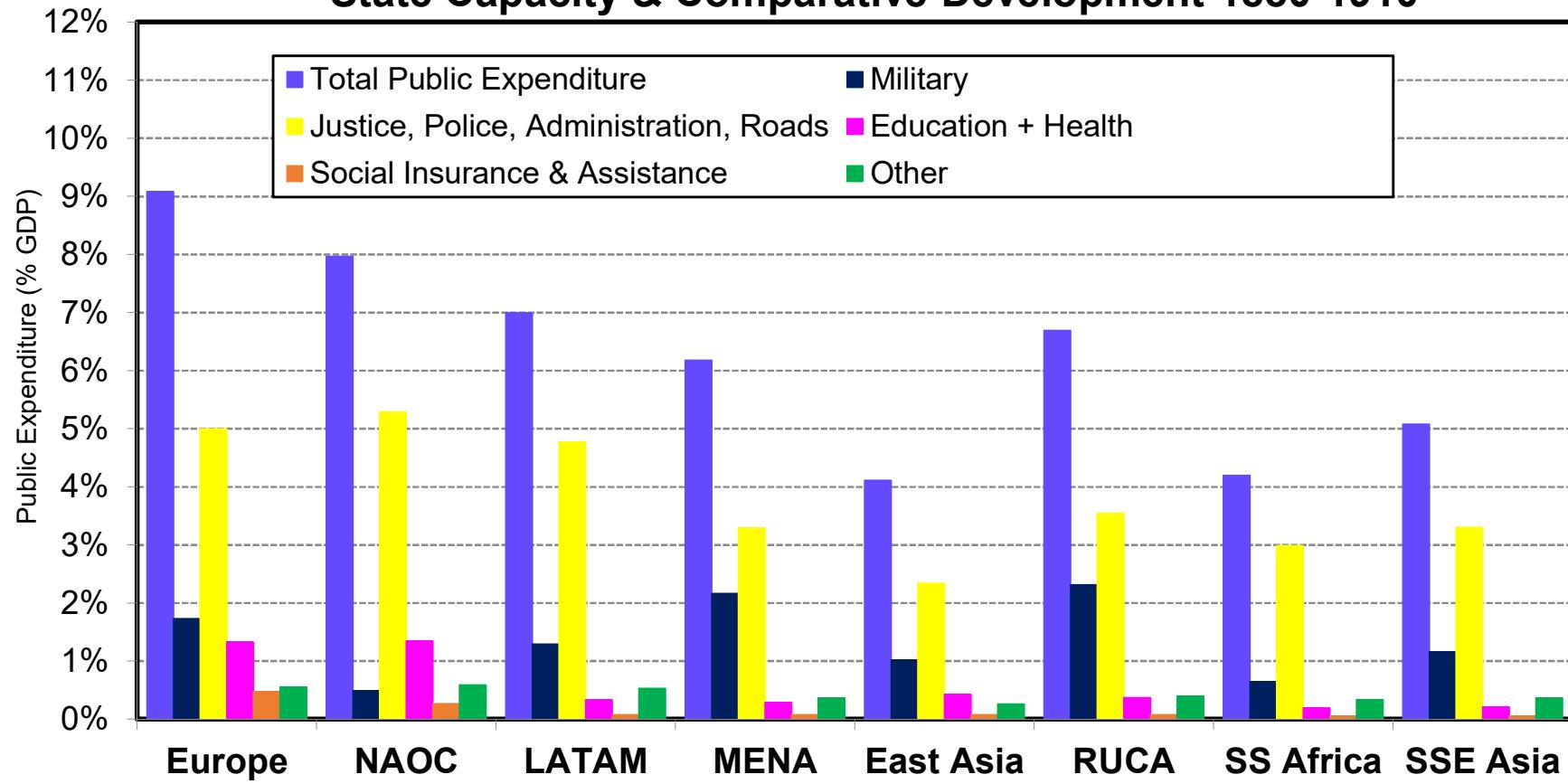
Sources and series: wid.world

State Capacity & Comparative Development, 1840-1880



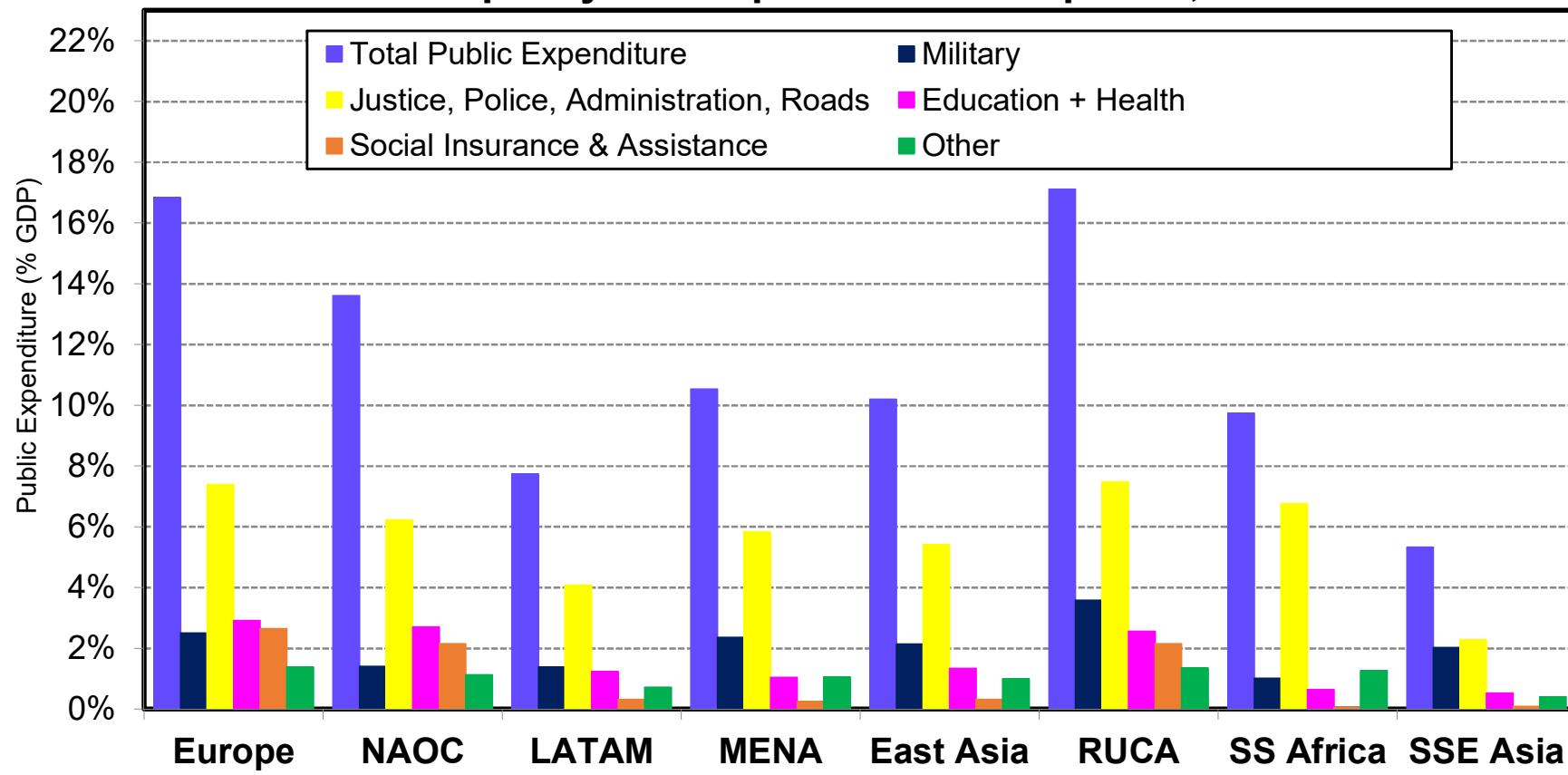
Sources and series: wid.world

State Capacity & Comparative Development 1880-1910



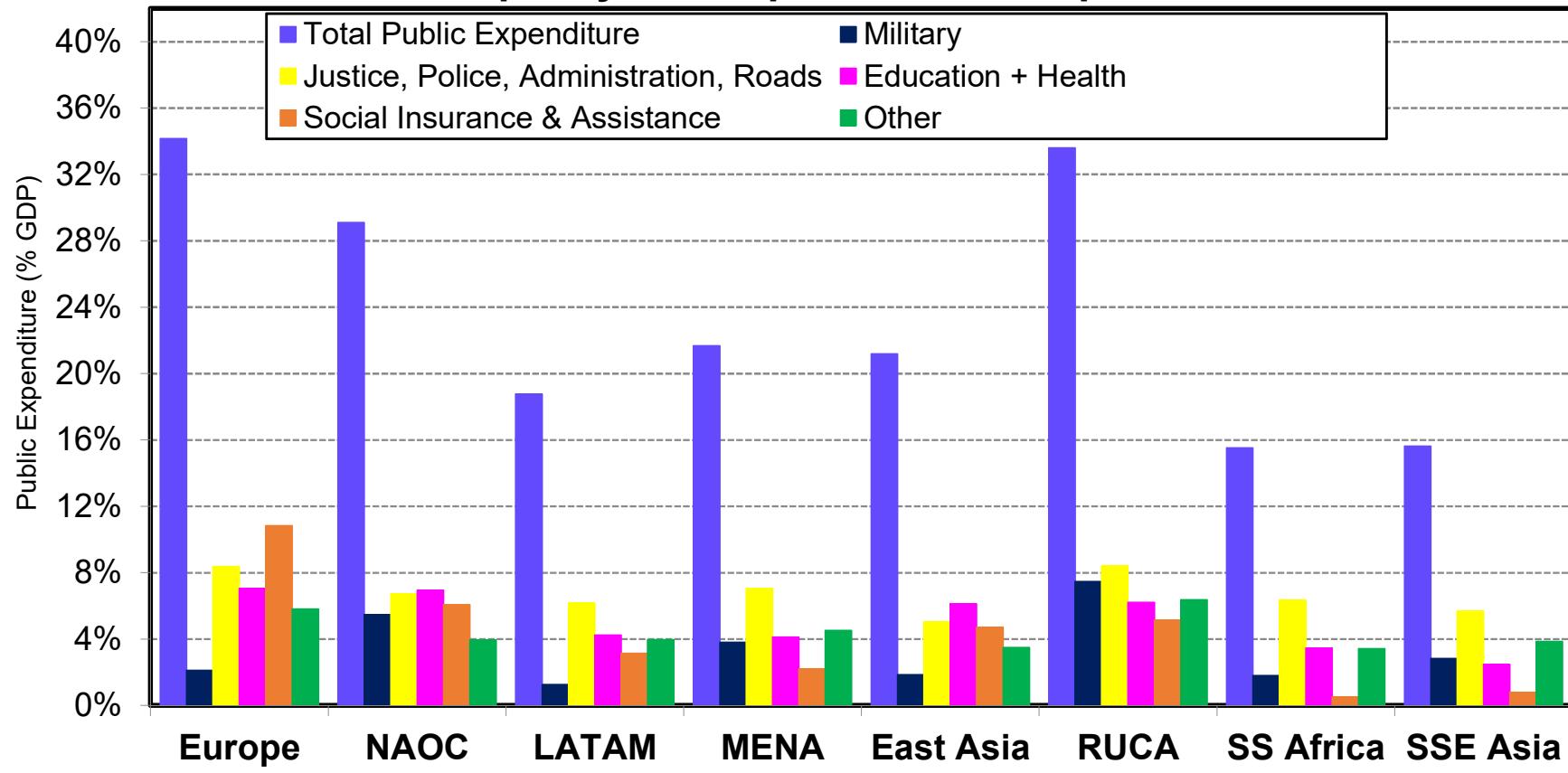
Sources and series: wid.world

State Capacity & Comparative Development, 1910-1950



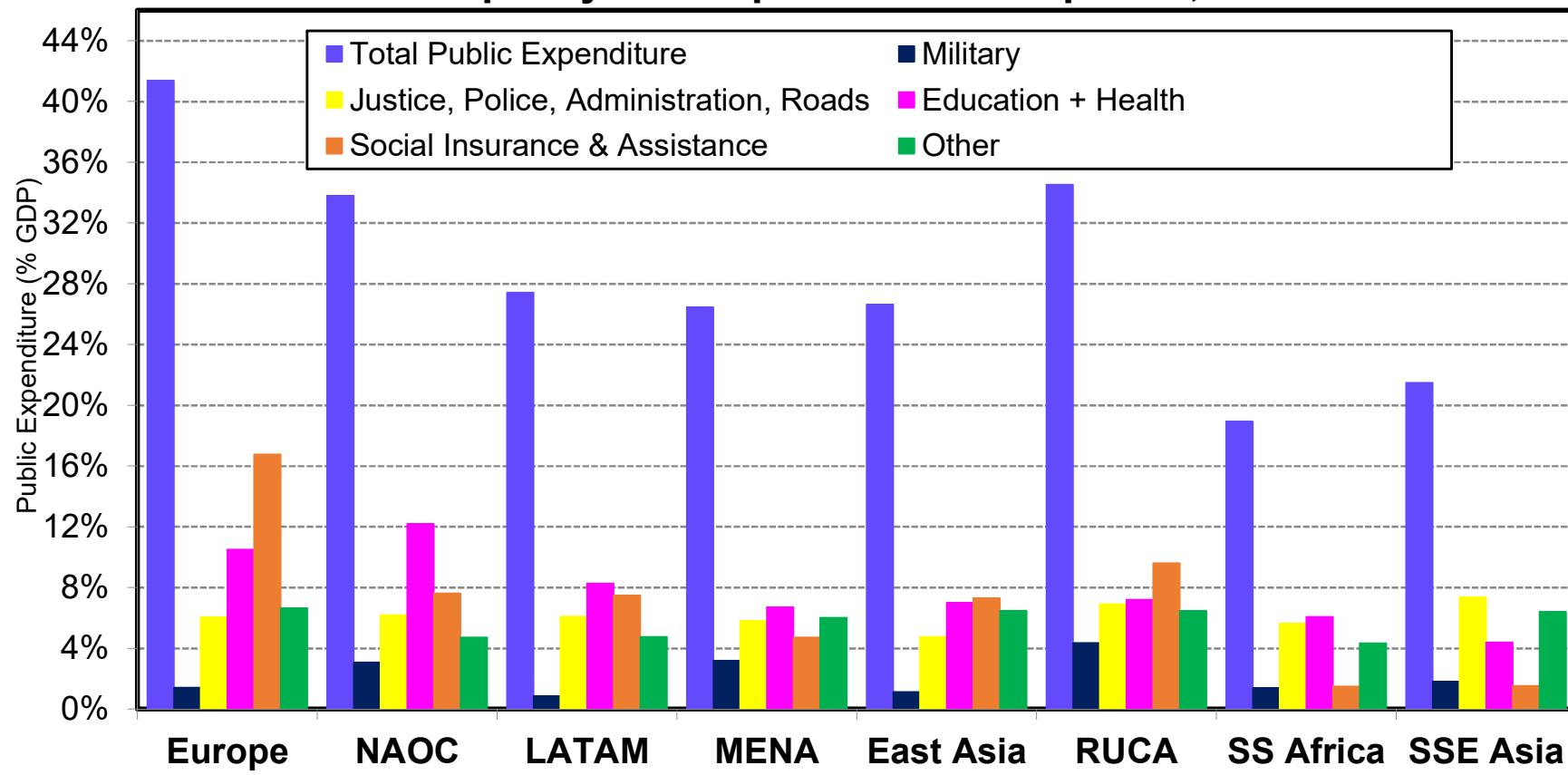
Sources and series: wid.world

State Capacity & Comparative Development 1950-1990



Sources and series: wid.world

State Capacity & Comparative Development, 1990-2025



Sources and series: wid.world

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%	3,7%	1,4%
Latin America	1,3%	1,2%	1,7%	2,0%	0,6%
Middle East/ North Africa	1,5%	1,1%	1,4%	3,0%	1,4%
North America/ Oceania	1,7%	1,6%	2,1%	1,8%	1,6%
Russia/ Central Asia	1,7%	0,4%	3,9%	3,1%	1,4%
South/South-East Asia	1,1%	0,5%	0,4%	1,8%	3,2%
Sub Saharan Africa	0,9%	0,4%	2,4%	0,6%	1,1%
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 1.6% over 1910-1950 and 2.3% and 1.8% over 1950-1990 and 1990-2025. Sources and series: wid.world					

State Capacity and the Early Productivity Gap, 1800-1840				
	Hourly Productivity 1800-1820 (net domestic product per work hour) (20-year-averages) (log)		Annual Growth Rate of Hourly Productivity 1800-1840 (computed over previous 20 years)	
Total Public Expenditure (% GDP) (averages over previous 20 years) (s.e.)	13.328*** (0.751)		0.032*** (0.011)	
Incl. Basic Public Services (Justice, Police, Administration, Roads, etc.) (s.e.)		17.303*** (0.936)		0.039*** (0.014)
Incl. Military Expenditure (s.e.)		-4.020 (3.298)		-0.014 (0.038)
R2	0,34	0,37	0,01	0,01
N.obs	627	627	627	627
Interpretation. In 1800-1820, countries with higher state capacity (as proxied by total public expenditure) also have higher productivity. A rise in public expenditure by 1% of GDP is associated with a 13.3% rise in GDP. Given that public expenditure varies at the time from 1-2% of GDP in the poorest world regions to about 7% in Europe, this implies that the state capacity gap can explain as much as 60-80% of the productivity gap (about 1 to 2 at the time). Higher state capacity is also associated to higher growth rates over the 1800-1840 period. Both effects seem to be driven by basic public services rather than by military expenditure.				

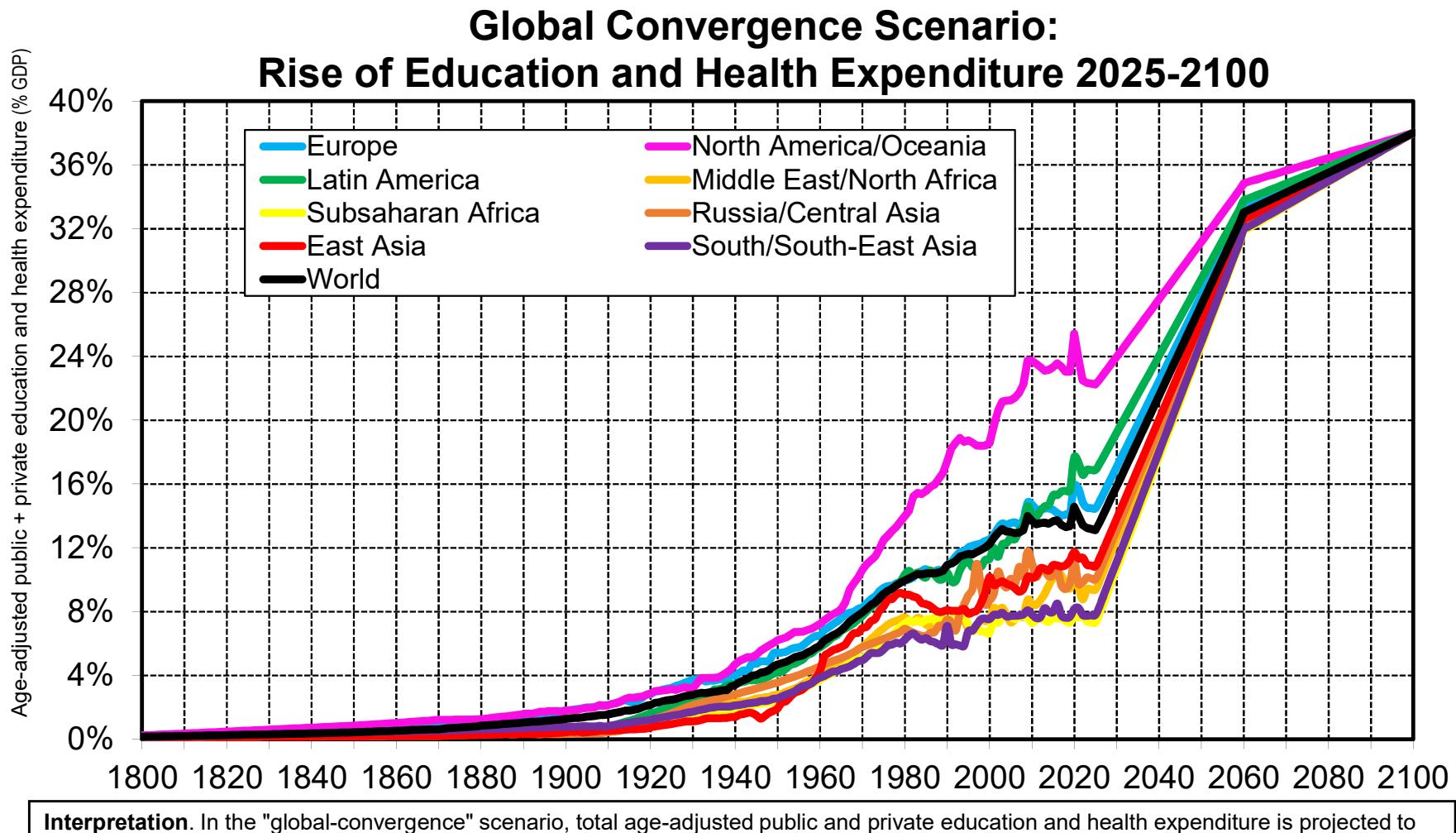
The Impact of Human & Social Capital Expenditure on Productivity Growth, 1800-2025

	Annual Growth Rate of Hourly Productivity (net domestic product per work hour) (computed over previous 20 years)				
Total Public Expenditure (% GDP) (averages over previous 20 years) (s.e.)	0.054*** (0.001)	0.048*** (0.001)			
Incl. Human & Social Expenditure (s.e.)			0.113*** (0.006)	0.053*** (0.006)	0.046*** (0.006)
Incl. Military Expenditure (s.e.)			0.029** (0.012)	-0.047*** (0.011)	0.006 (0.011)
Incl. Social Protection Expenditure (s.e.)			-0.037*** (0.006)	0.006 (0.006)	-0.021** (0.008)
Incl. Other Expenditure (s.e.)			-0.001 (0.015)	0.009 (0.016)	-0.014 (0.014)
Country Fixed Effects	NO	YES	YES	YES	YES
Capital-Output Ratio	NO	YES	YES	YES	YES
Period Fixed Effects	NO	NO	NO	YES	YES
Region x Period Fixed Effects	NO	NO	NO	NO	YES
Countries Covered	ALL	ALL	ALL	ALL	ALL
R2	0,14	0,21	0,23	0,33	0,53
N.obs	10602	10602	10602	10602	10602
Interpretation.	Over the 1800-2025 period, countries with higher public expenditure also have higher productivity growth. When public expenditure rises by 1% of GDP (e.g. from 10% to 11% of GDP), annual productivity growth increases by about 0.05% (e.g. from 1% to 1.05% per year). The effect is driven by human & social capital expenditure, including basic public services (justice, police, administration, roads, etc.), public human capital expenditure (education, health), and other human & social capital expenditure (research, culture, community, environment, etc.). It also holds after the inclusion of country fixed effects, capital-output ratio and region x period fixed effects (8 world regions interact 6 periods: 1800-1840, 1840-1880, 1880-1910, 1910-1950, 1950-1990, 1990-2025). Other categories of public expenditure have no robust significant impact on productivity growth.				

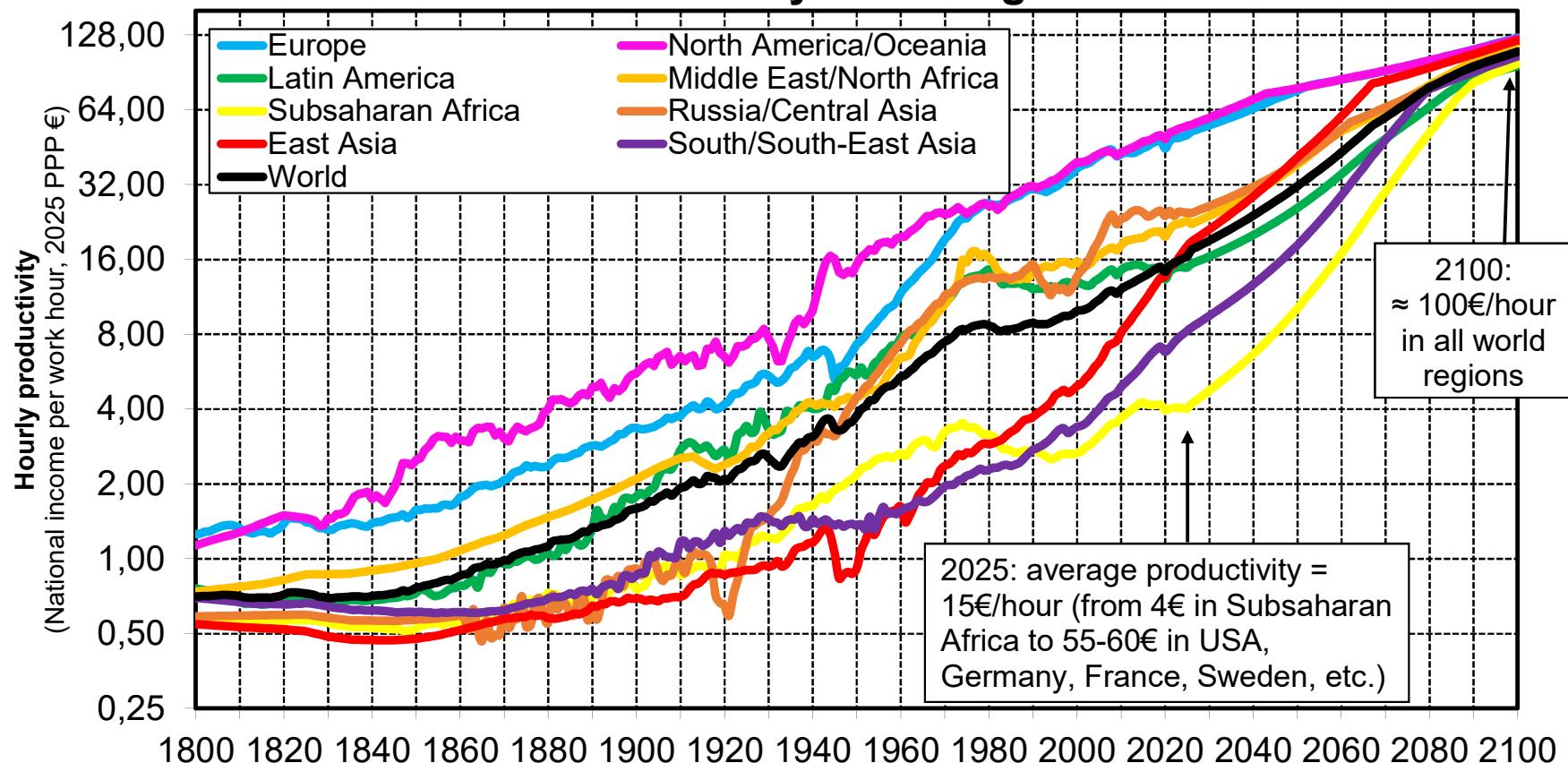
The Impact of Human Capital Expenditure on Productivity Growth, 1800-2025: Education vs Health Expenditure, Public vs Private Expenditure

	Annual Growth Rate of Hourly Productivity (net domestic product per work hour) (computed over previous 20 years)									
Total Human Capital Expenditure (% GDP) (averages over previous 20 years) (s.e.)	0.099*** (0.004)	0.086*** (0.004)	0.166*** (0.005)	0.244*** (0.019)	0.040*** (0.008)	0.159*** (0.006)	0.420*** (0.013)	0.336*** (0.014)	0.850*** (0.025)	0.155*** (0.045)
Incl. Education (s.e.)										
Incl. Health (s.e.)										
Incl. Public Expenditure (s.e.)										
Incl. Private Expenditure (s.e.)										
Incl. Public Education (s.e.)										
Country Fixed Effects	NO	YES	YES	NO	NO	NO	YES	YES	YES	
Capital-Output Ratio	NO	YES	YES	NO	NO	NO	YES	YES	YES	
Region x Period Fixed Effects	NO	NO	NO	NO	NO	NO	NO	NO	YES	
Countries Covered	ALL	ALL	POOR	ALL	ALL	ALL	ALL	POOR	POOR	
R2	0,07	0,17	0,22	0,08	0,08	0,09	0,16	0,22	0,49	
N.obs	10602	10602	8743	10602	10602	10602	10602	8743	8743	

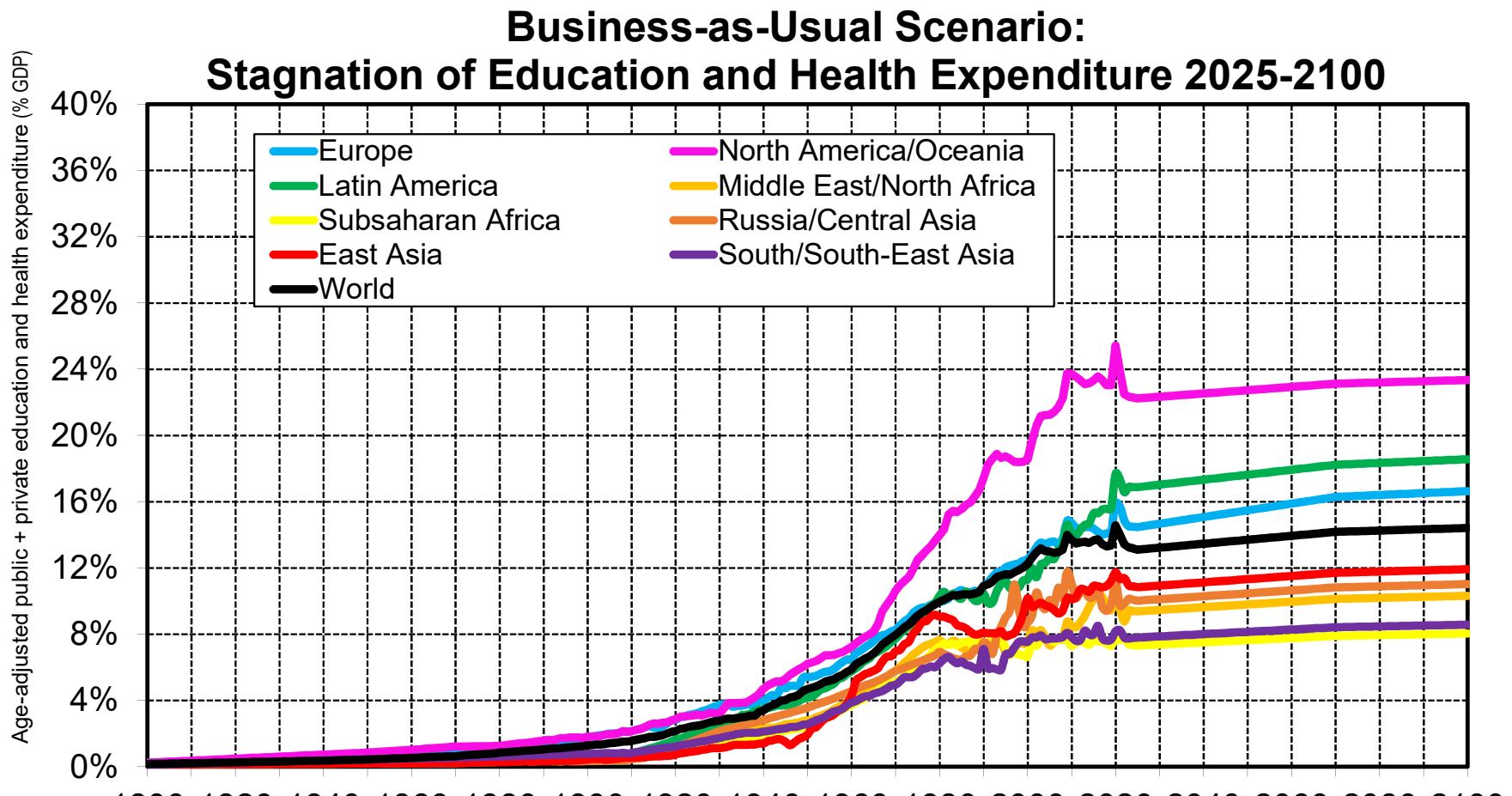
Interpretation. When (age-adjusted) human capital expenditure (public and private education and health expenditure) expressed as % of GDP increases by 1% (e.g. from 10% to 11% of GDP), annual productivity growth increases by about 0.1% (e.g. from 1% to 1.1% per year). I.e. the annual rate of return to human capital investment is about 10% (consistent with micro studies). The return is higher for education than for health and for public expenditure than for private expenditure. It is even larger for poor countries (productivity < 10€ PPP 2025/hour) and for public education. This effect also holds after the inclusion of country fixed effects, capital-output ratio and region x period fixed effects (8 world regions interact 6 periods: 1800-1840, 1840-1880, 1880-1910, 1910-1950, 1950-1990, 1990-2025).



Global Convergence Scenario: Rise of Productivity in All Regions 2025-2100

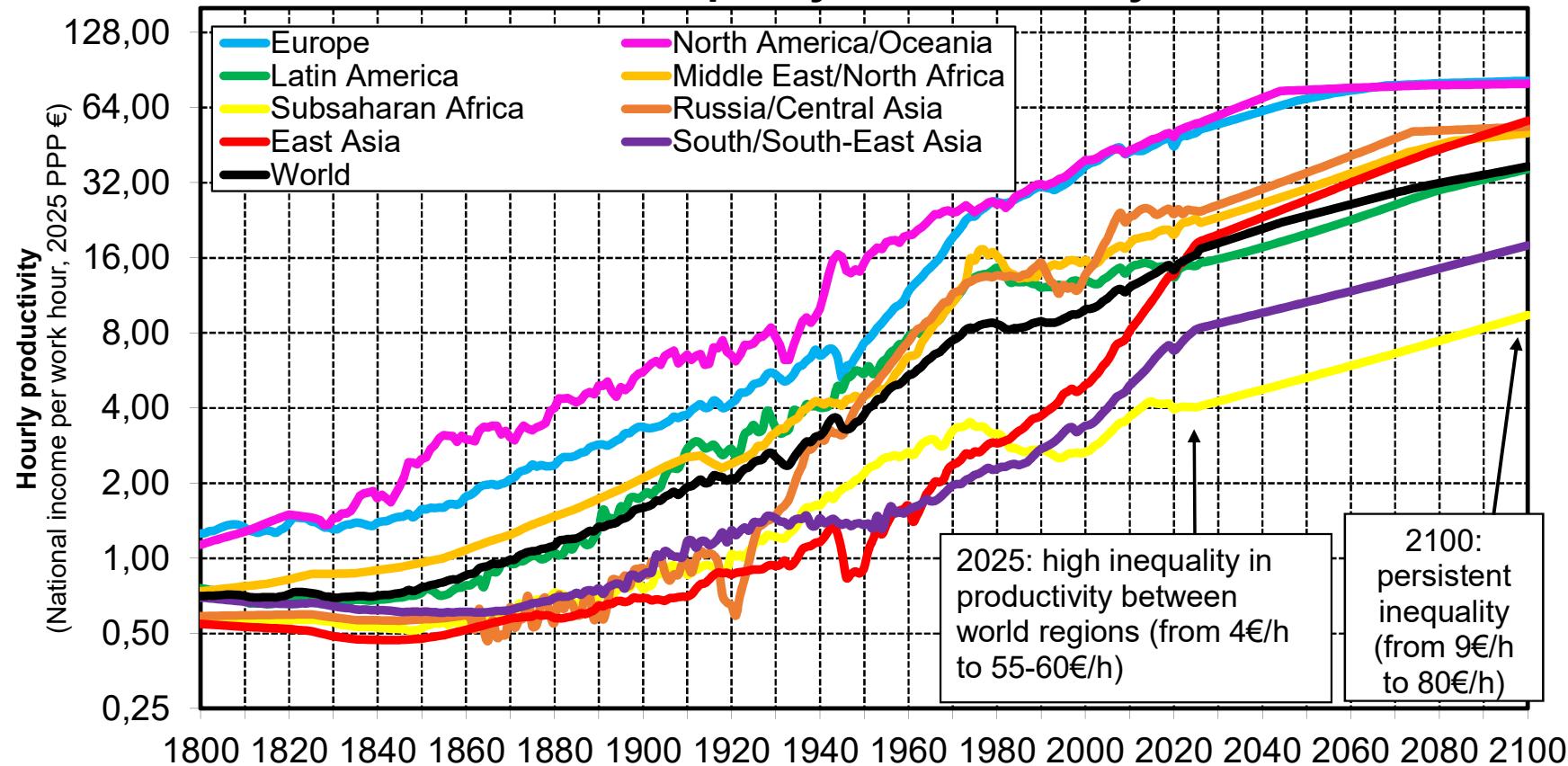


Interpretation. Under the "global convergence" scenario, productivity growth rates are projected to rise substantially in 2025-2100, so that all regions converge to about 100-120€/hour by 2100. This involves in particular a large acceleration of productivity growth in Subsaharan Africa (4.4% per year over 2025-2100 period, i.e. the same as in East Asia 1990-2025). **Sources and series:** see wid.world



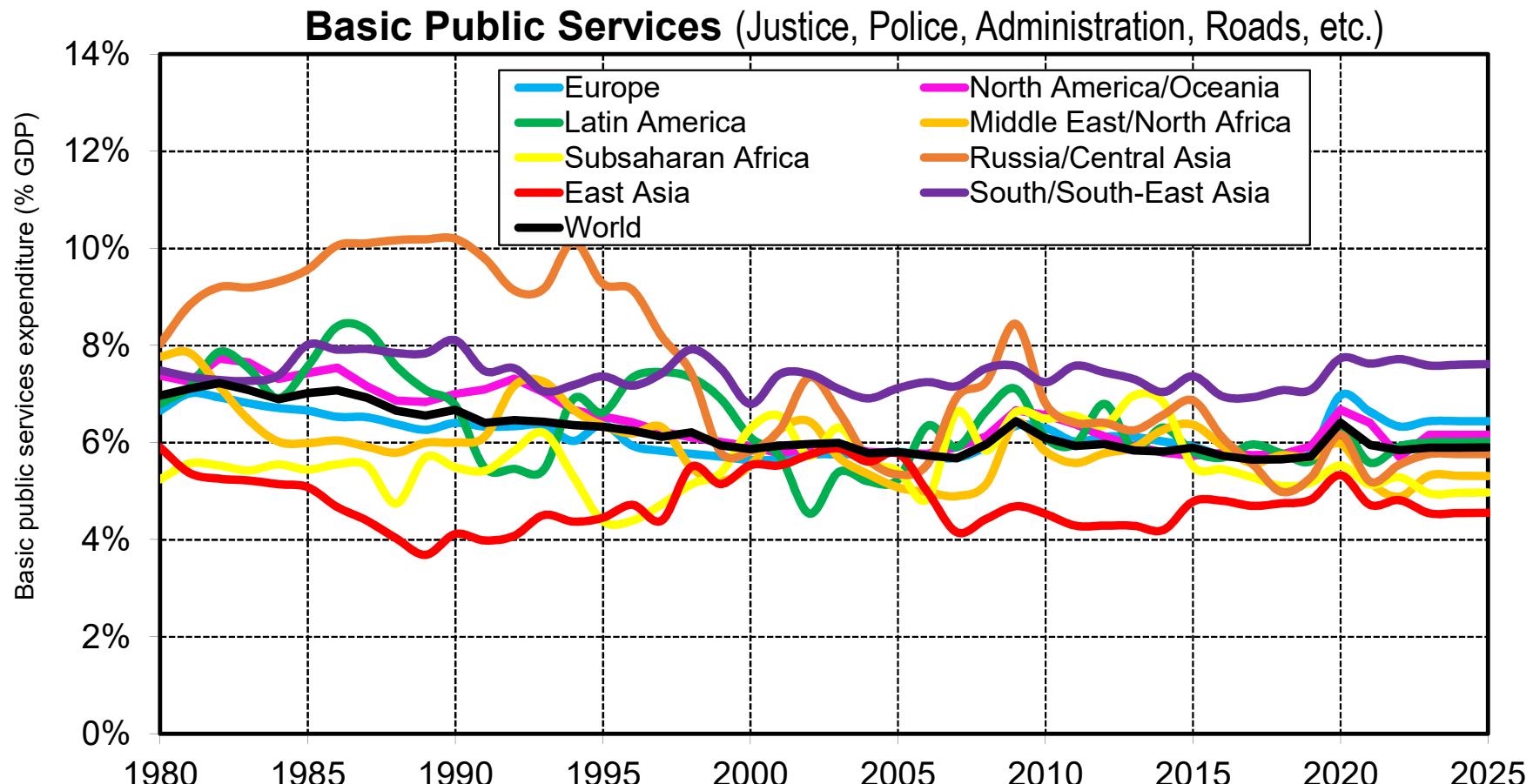
Interpretation. In the "business-as-usual" scenario, total age-adjusted public and private education and health expenditure is projected to stabilize (as a share of GDP) in all world regions during the 2025-2100 period. **Sources and series:** wid.world

Business-As-Usual Scenario: Persistent Inequality in Productivity 2025-2100



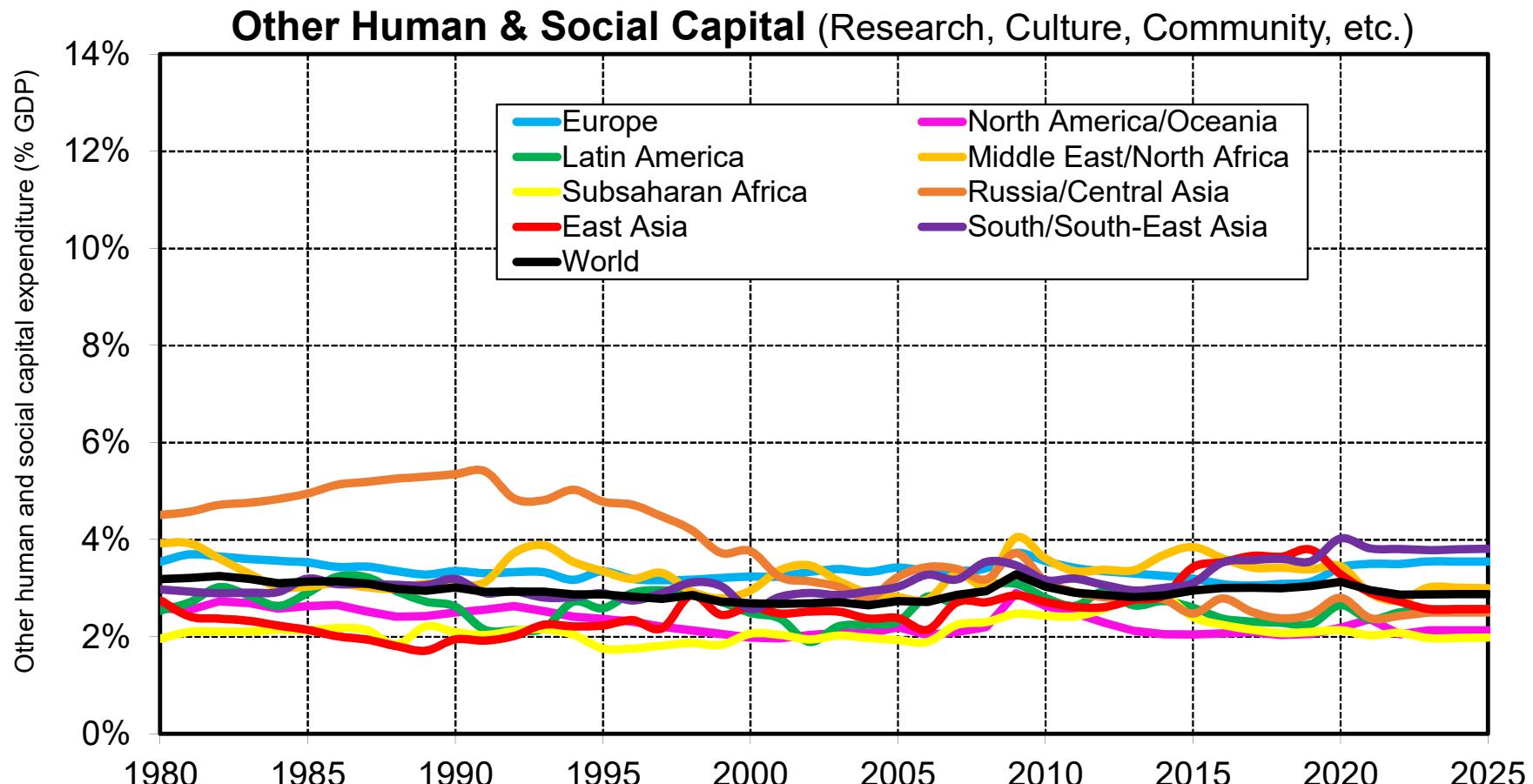
Interpretation. Under the "business-as-usual" scenario (stagnation of education and health expenditure), inequality in hourly productivity is projected to remain very high between world regions by 2100. In particular, productivity in 2100 would be only 9€/hour in Subsaharan Africa.
Sources and series: see [wid.world](#)

Simulations 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	18,1	1,5%	56,6	2,6%	121,8
Europe	50,6	0,6%	81,9	1,2%	124,9
Latin America	14,8	1,2%	36,2	2,5%	95,8
Middle East/ North Africa	22,9	1,1%	50,5	2,1%	112,6
North America/ Oceania	55,1	0,5%	79,6	1,1%	123,5
Russia/ Central Asia	24,7	1,0%	53,7	2,0%	109,5
South/South-East Asia	8,3	1,0%	17,9	3,4%	104,9
Sub Saharan Africa	4,0	1,1%	9,4	4,4%	98,1
World	16,5	1,1%	37,1	2,6%	109,6
Interpretation. In the "business-as-usual" scenario (frozen human capital expenditure), productivity growth in 2025-2100 is projected to decline as compared to 1900-2025 (1.1% vs 1.8% at the world level). In the "global convergence" scenario (rising human capital expenditure), simulated productivity growth rates accelerate and all regions converge to about 100-120€ in hourly productivity by 2100.					
Sources and series: wid.world					

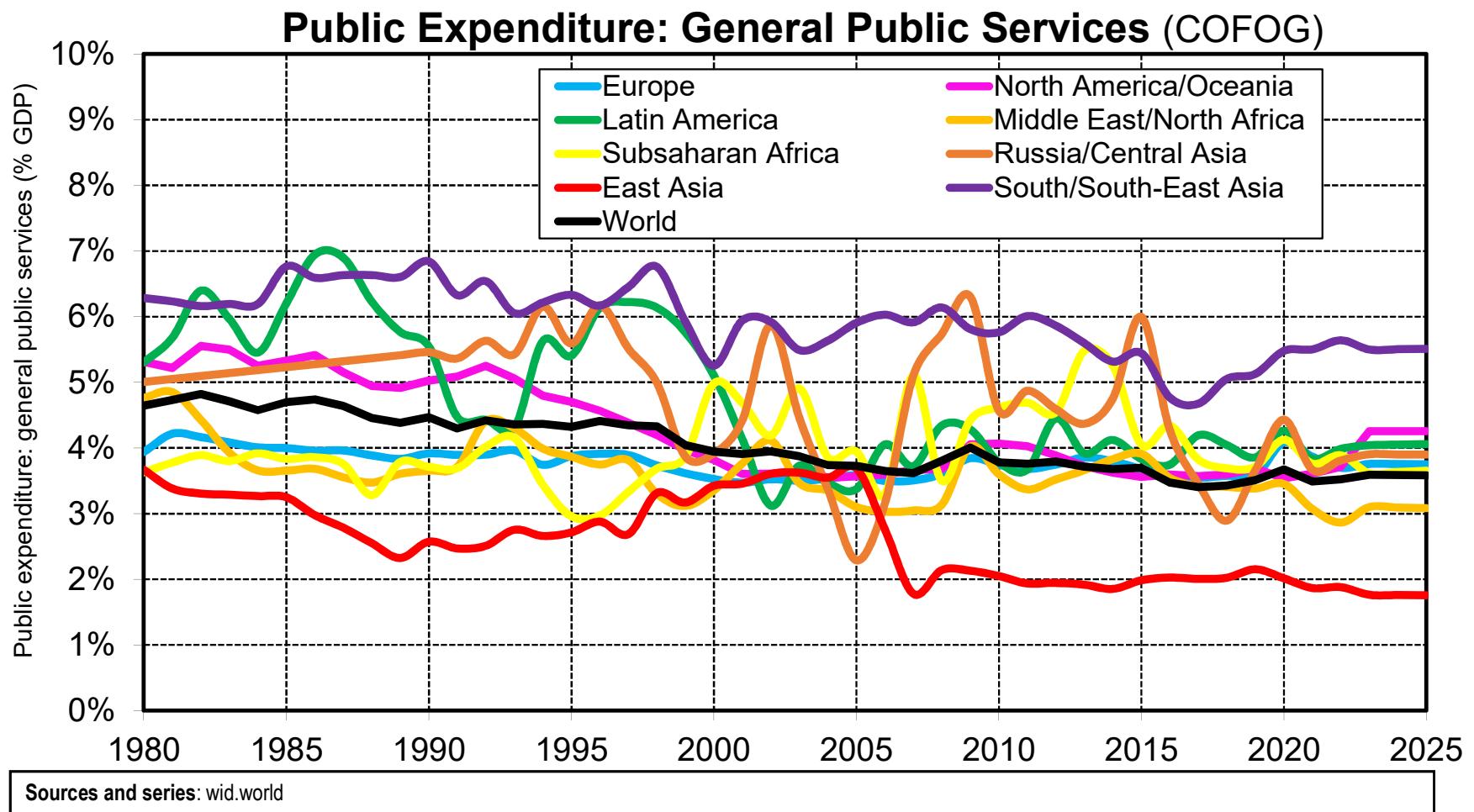


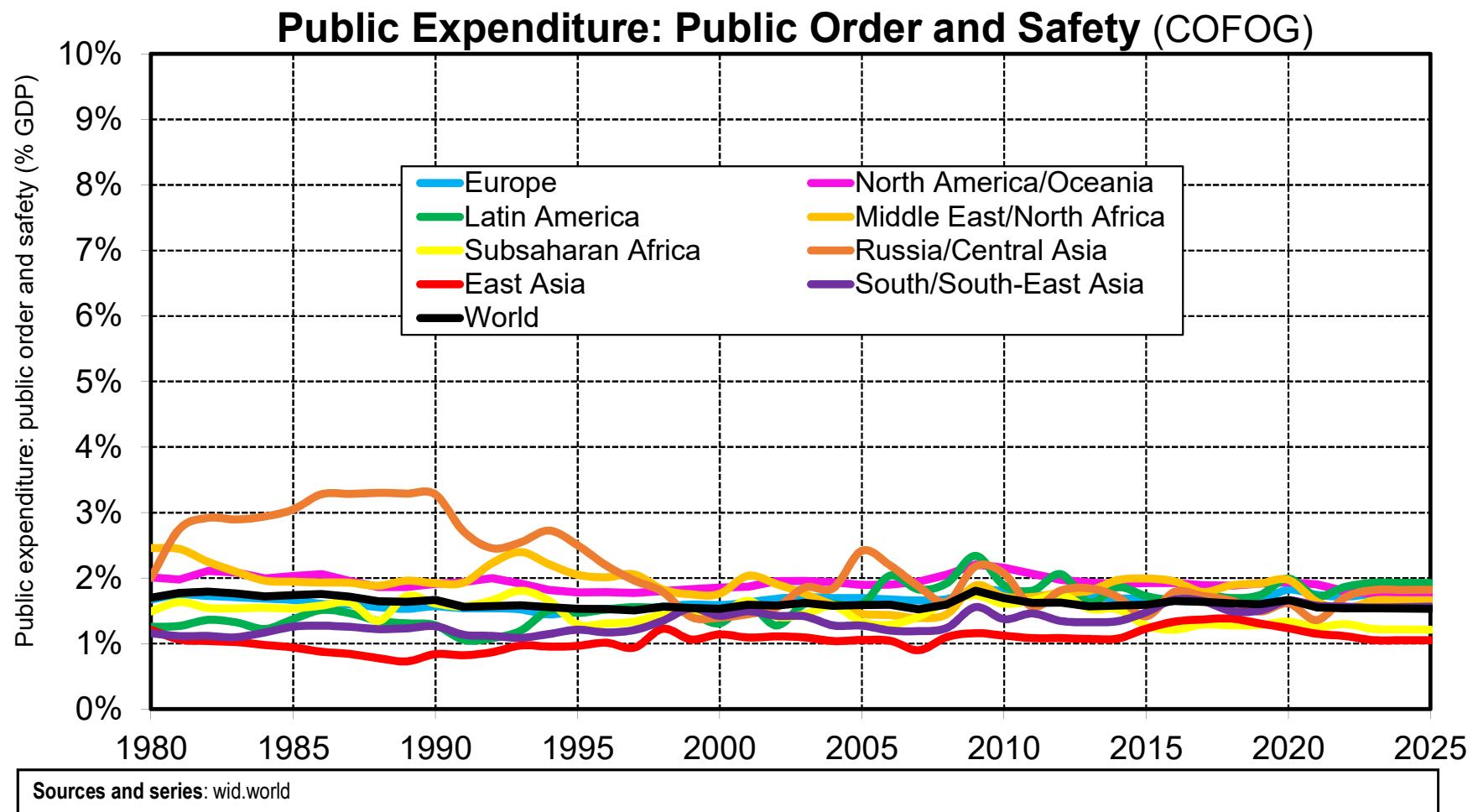
Note. Basic public services = 80% General public services + 100% Public order and safety + 30% Economic affairs (COFOG)

Sources and series: wid.world



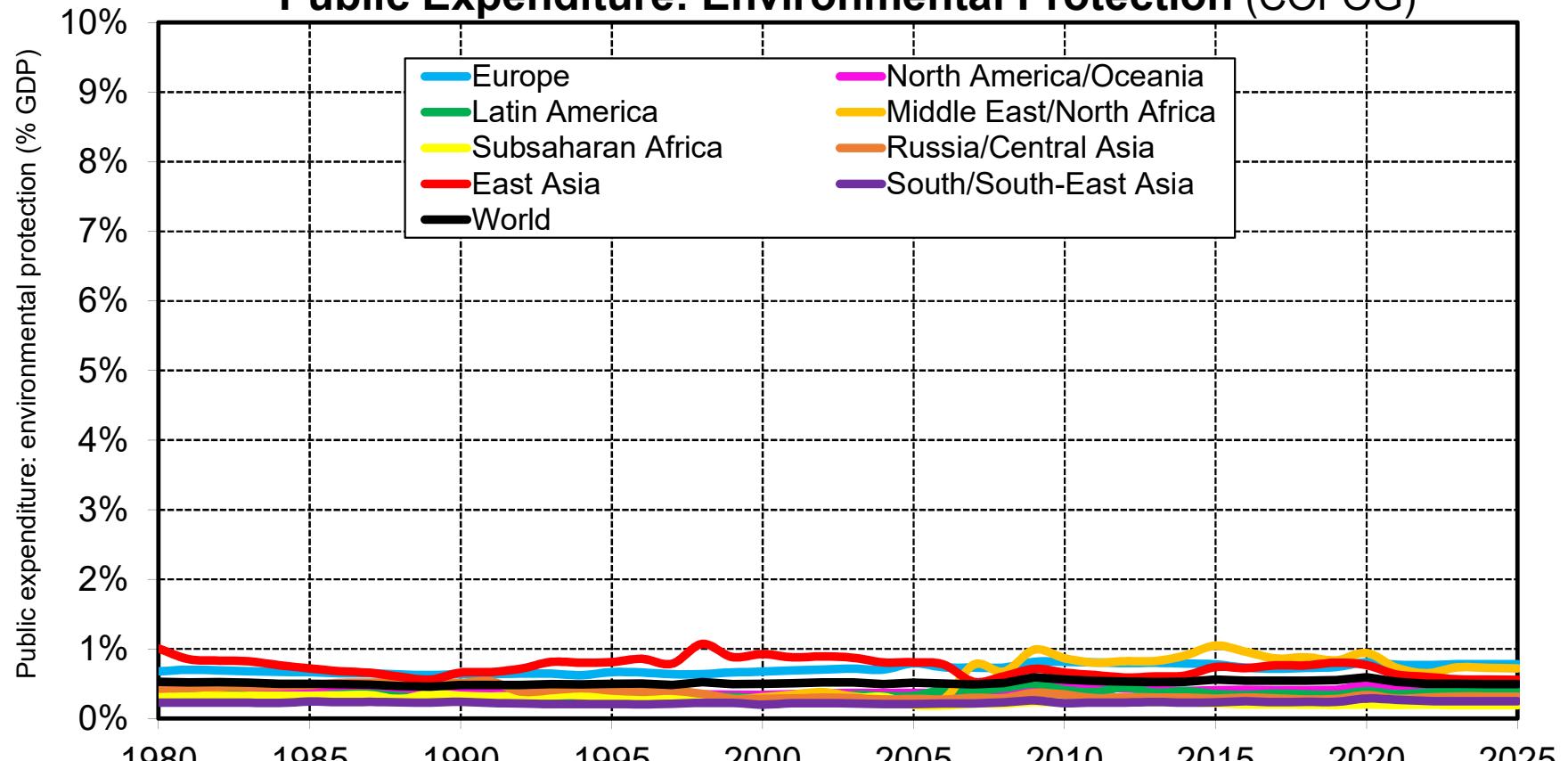
Note. Other human and social expenditure = 20% General public services + 100% Environmental Protection, Housing & community services, Recreation/culture/religion (COFOG). **Sources and series:** wid.world



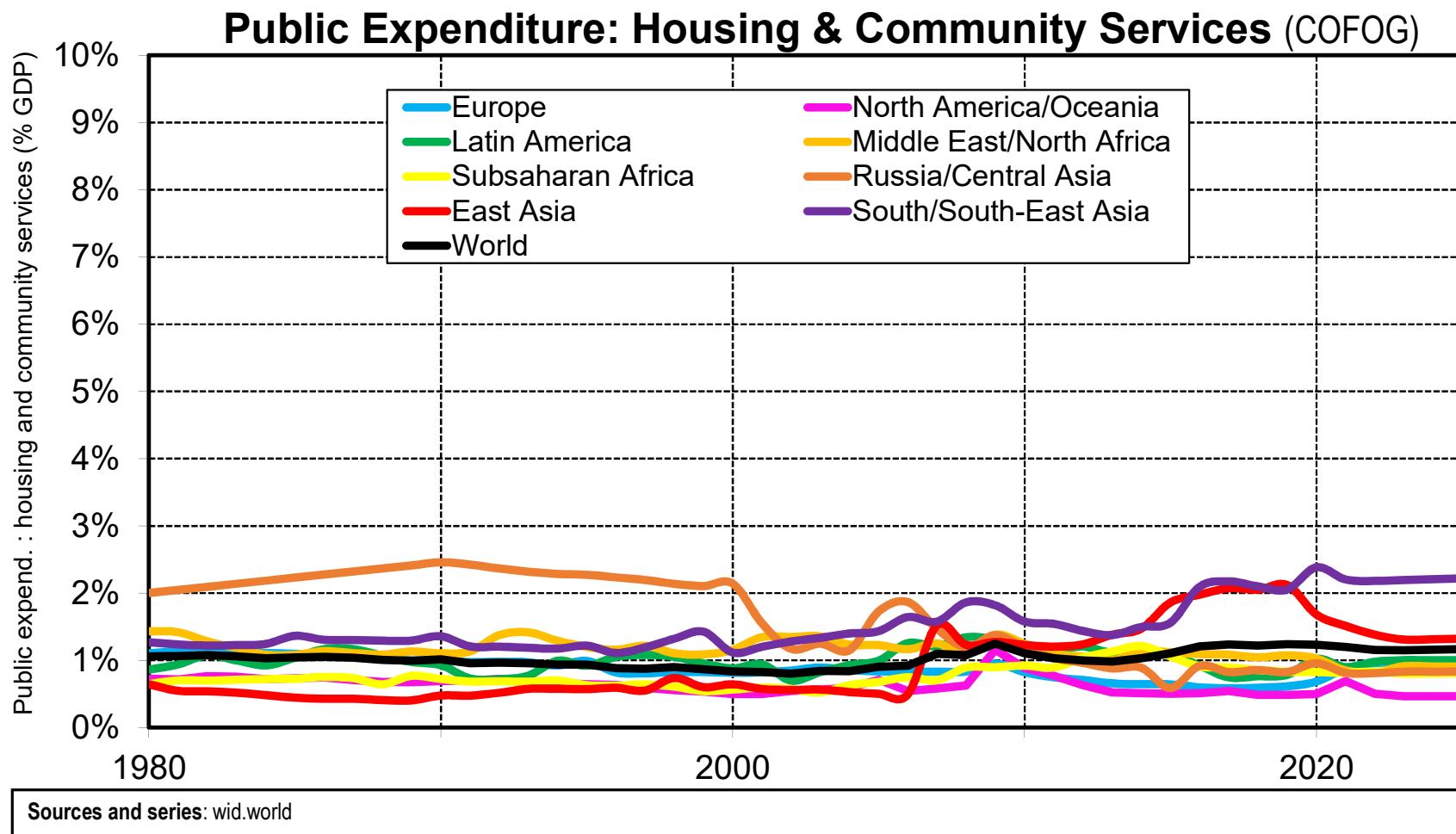


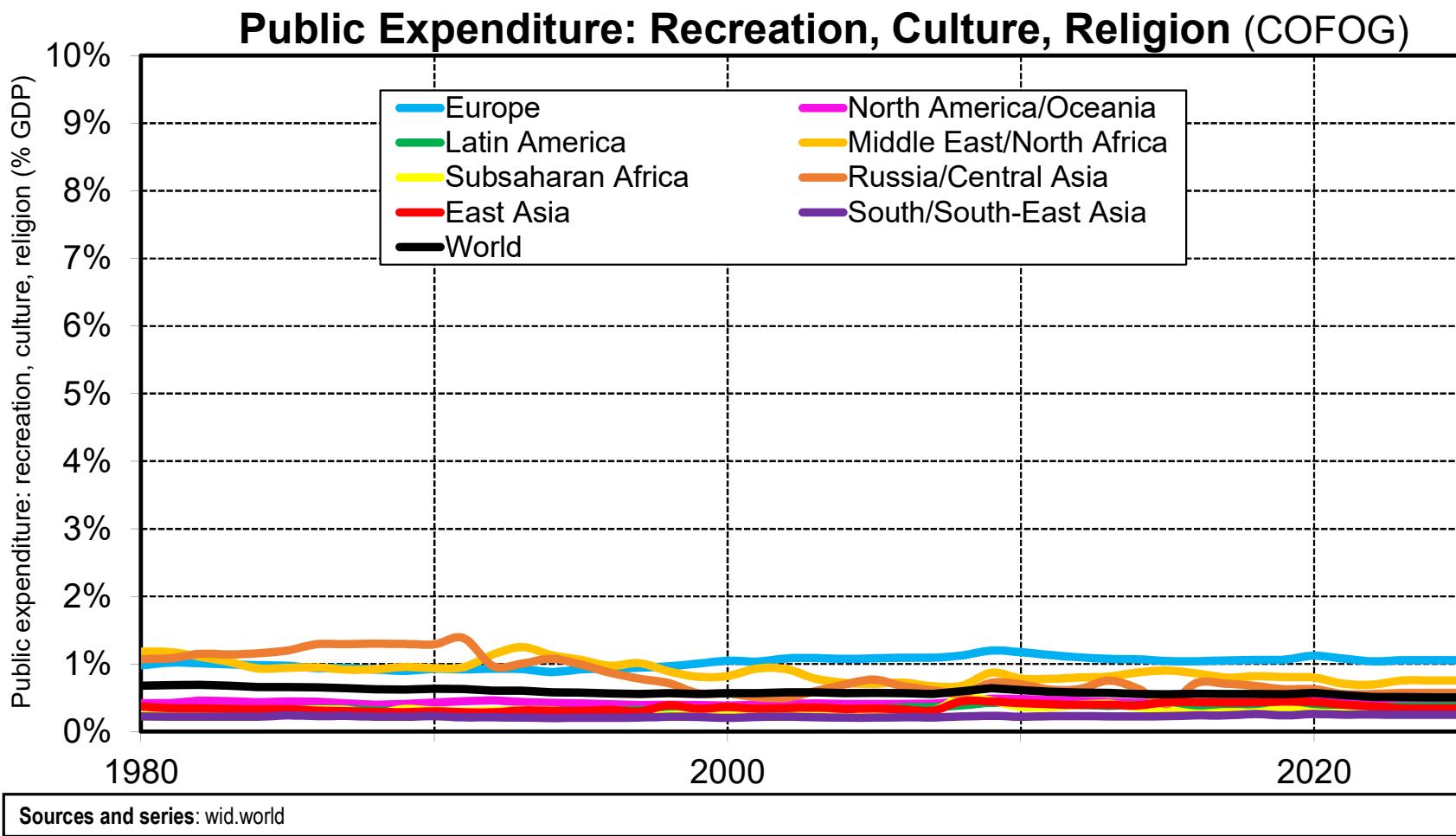
Sources and series: wid.world

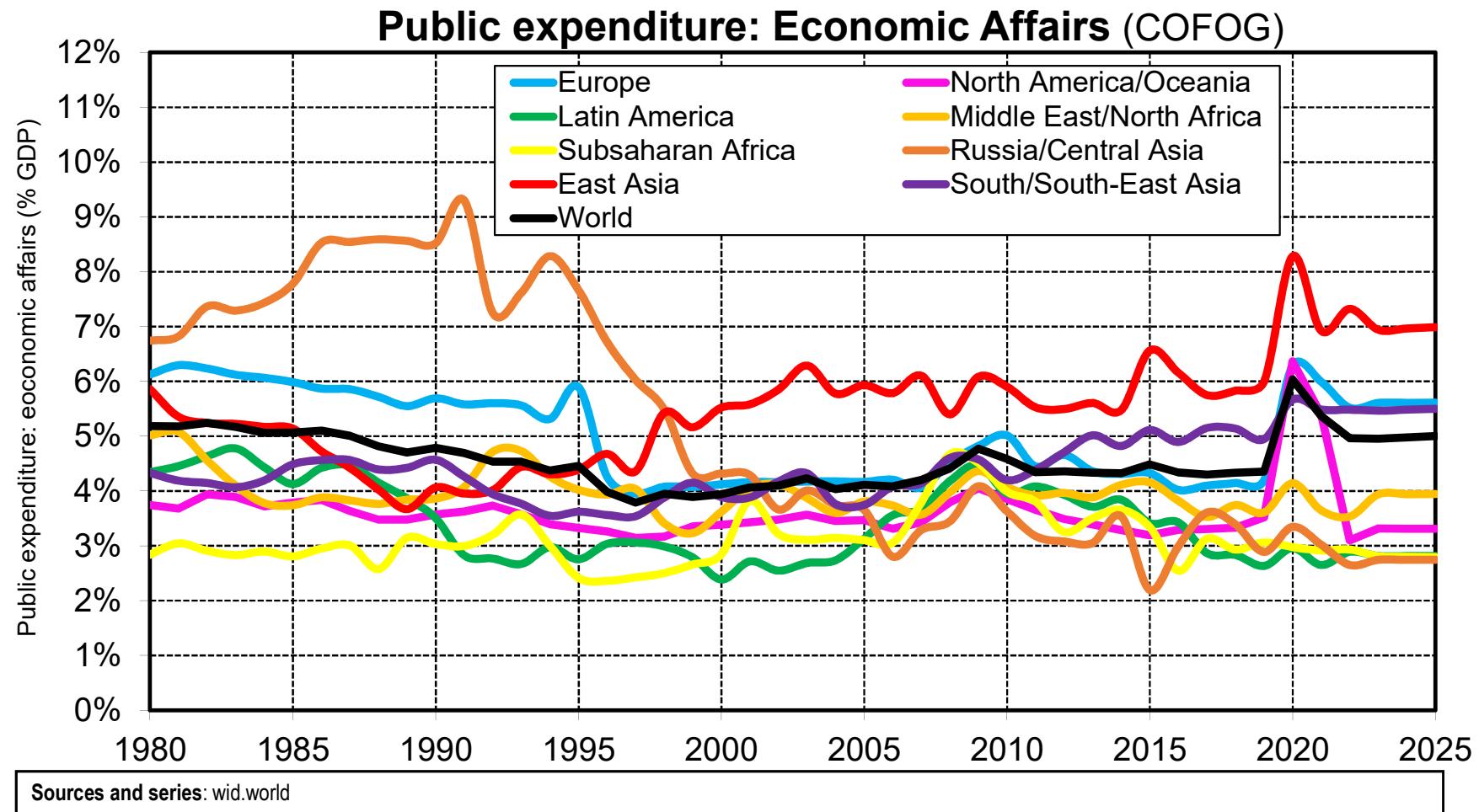
Public Expenditure: Environmental Protection (COFOG)

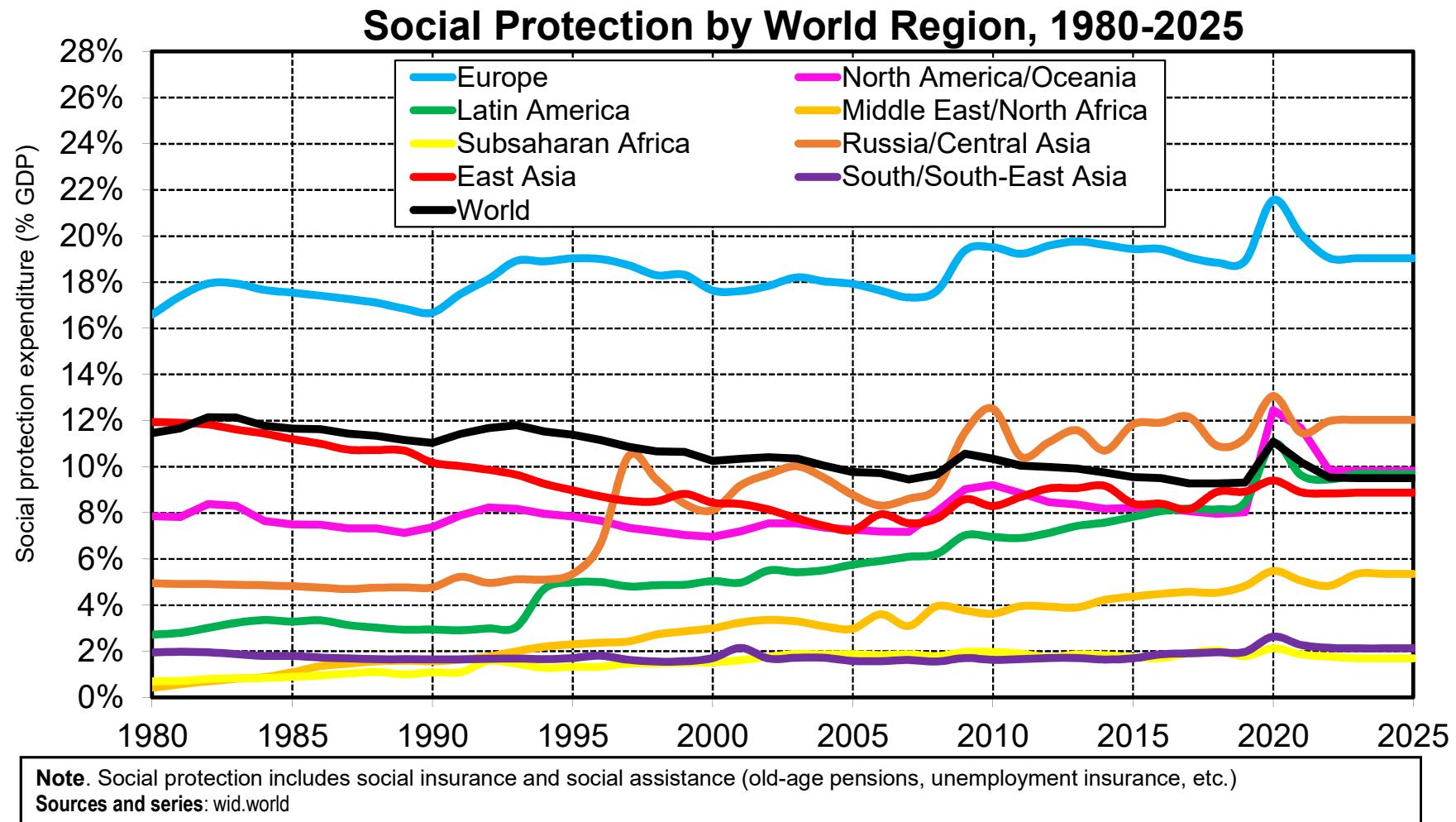


Sources and series: wid.world

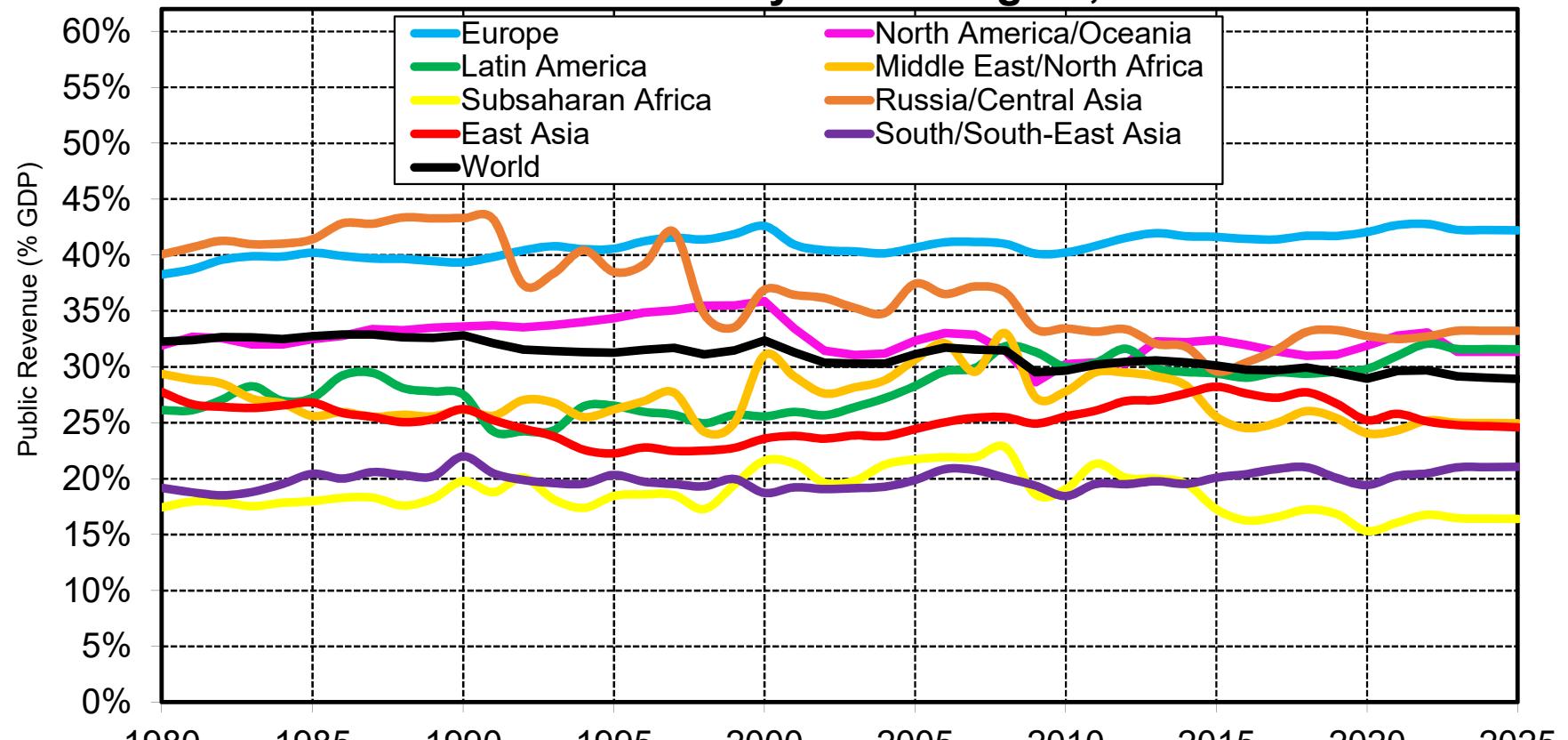




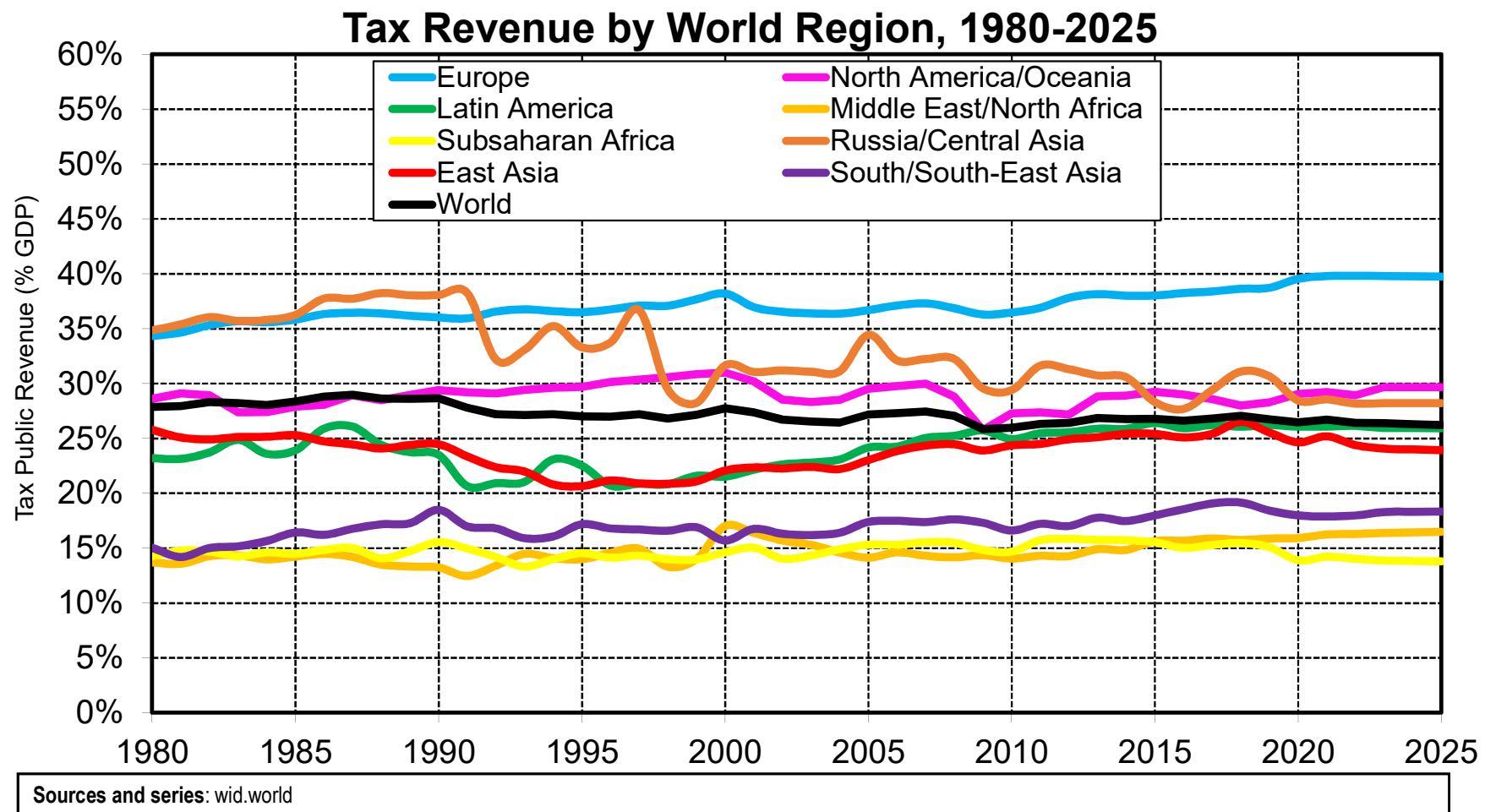


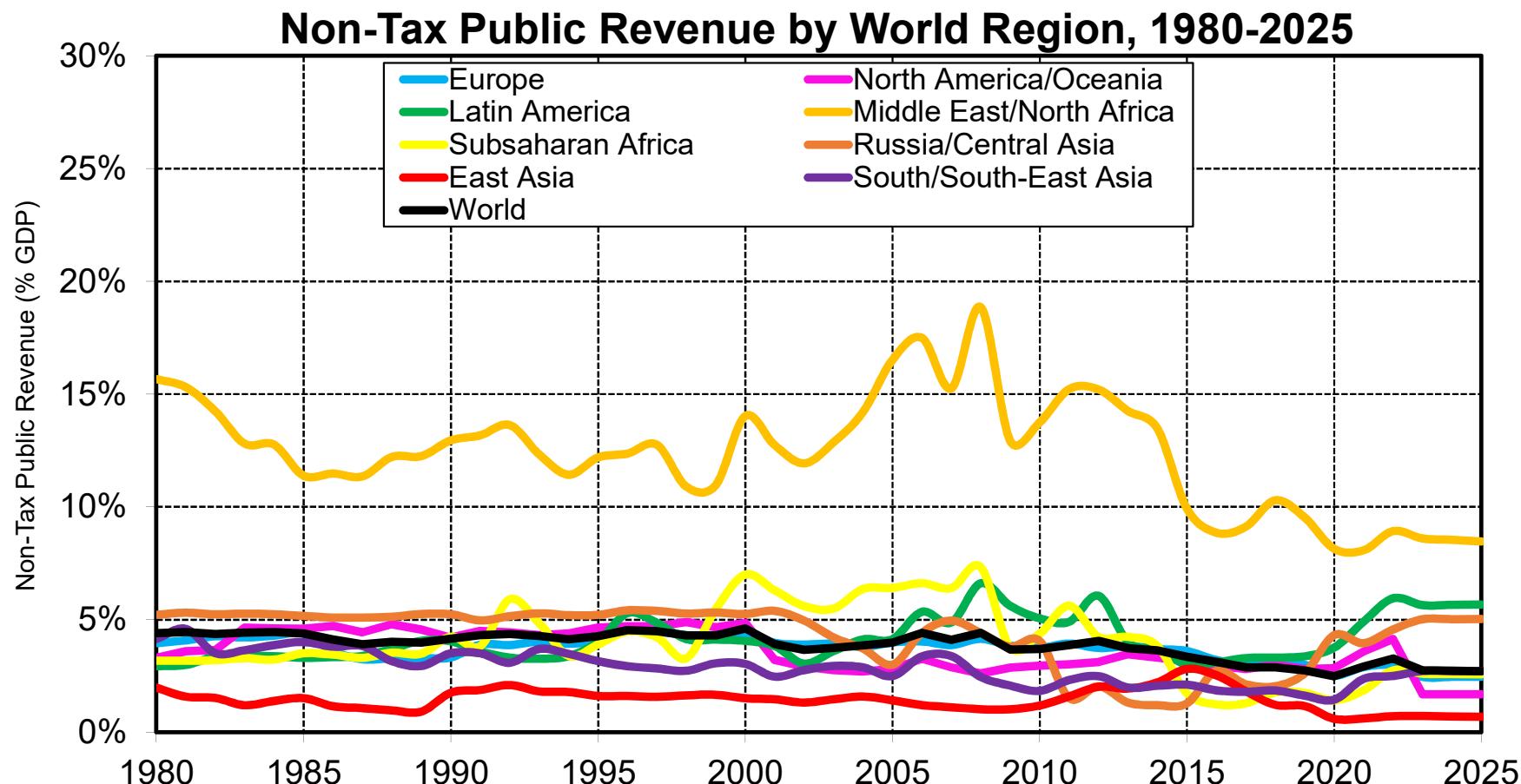


Public Revenue by World Region, 1980-2025

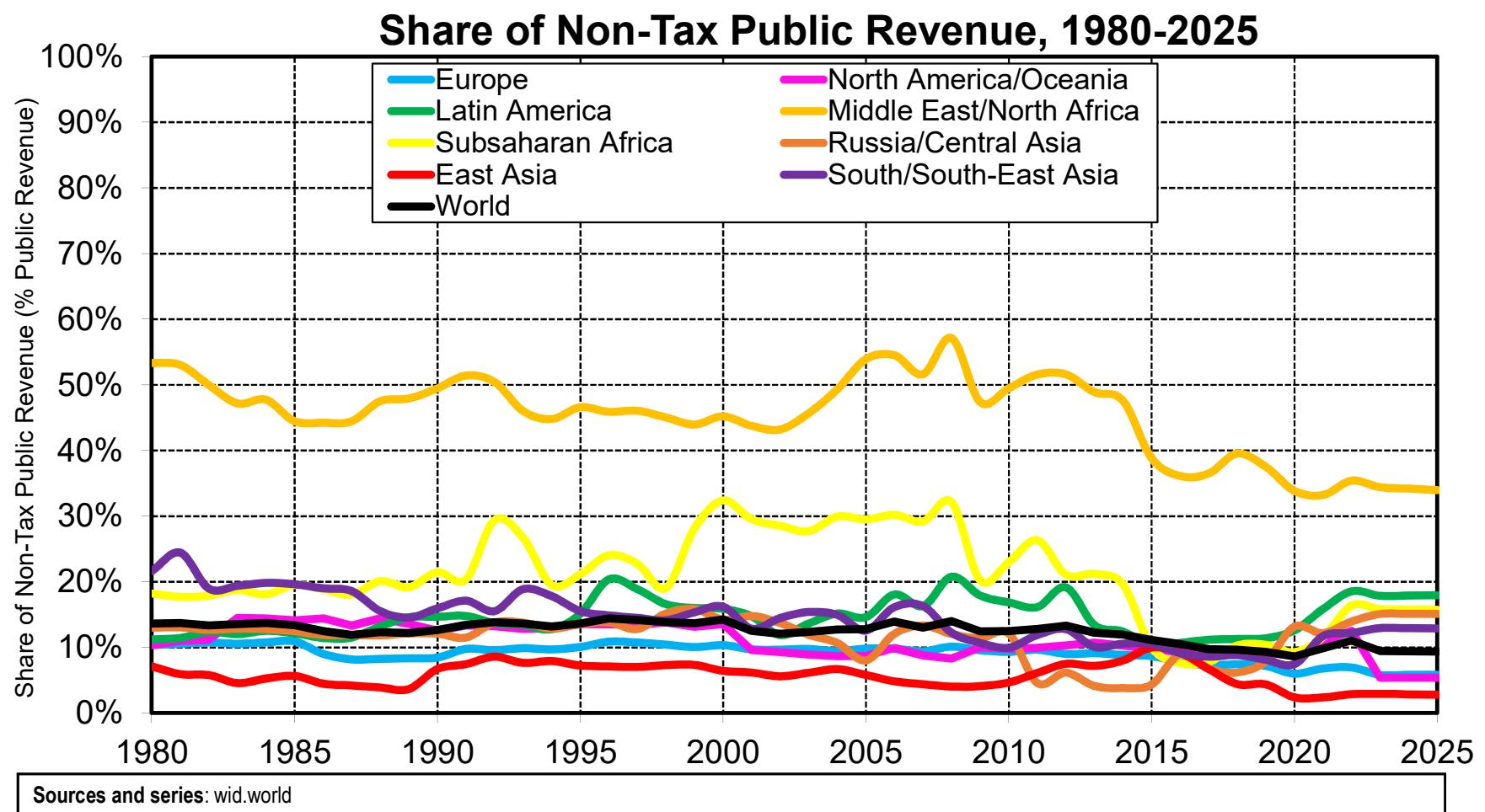


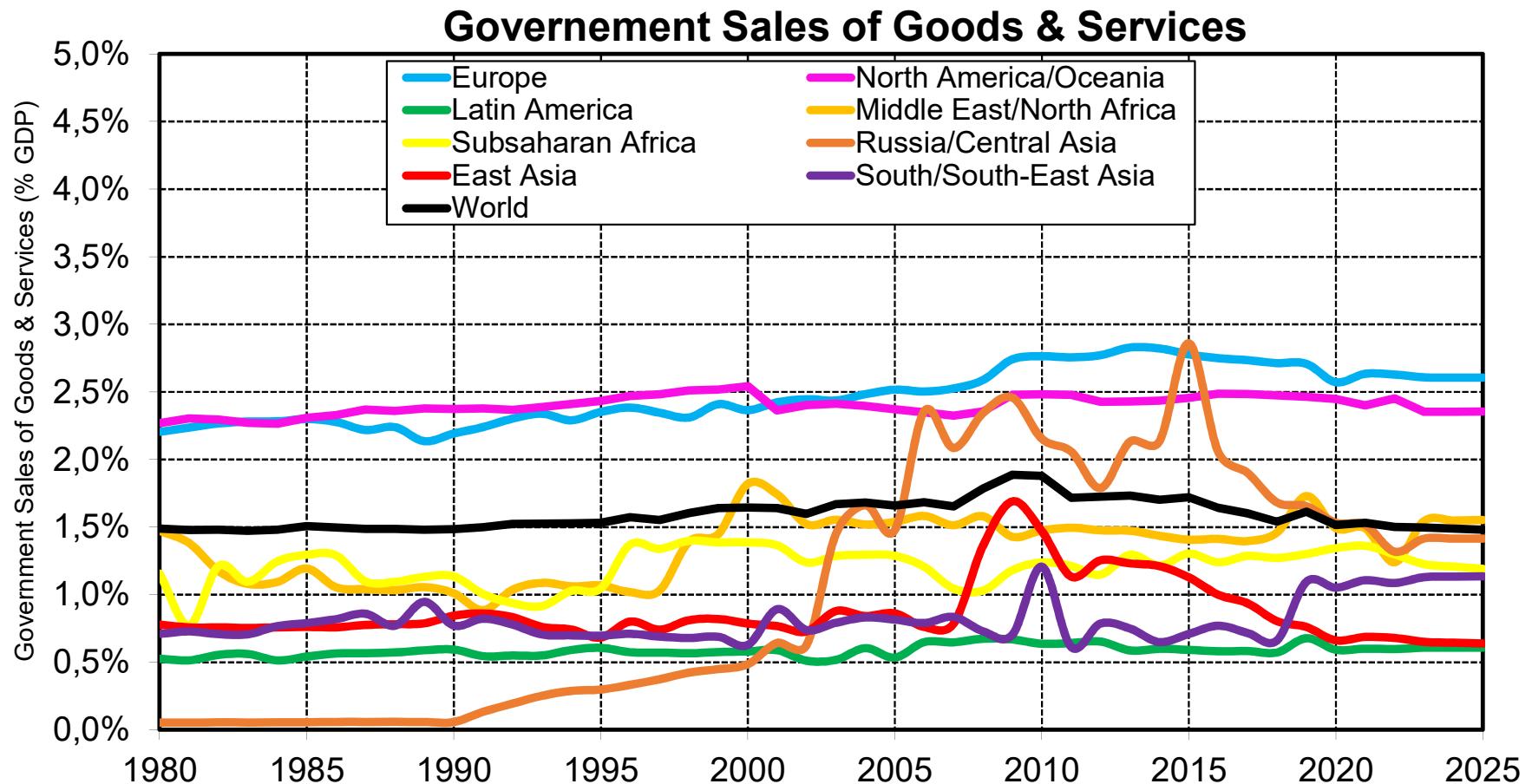
Sources and series: wid.world



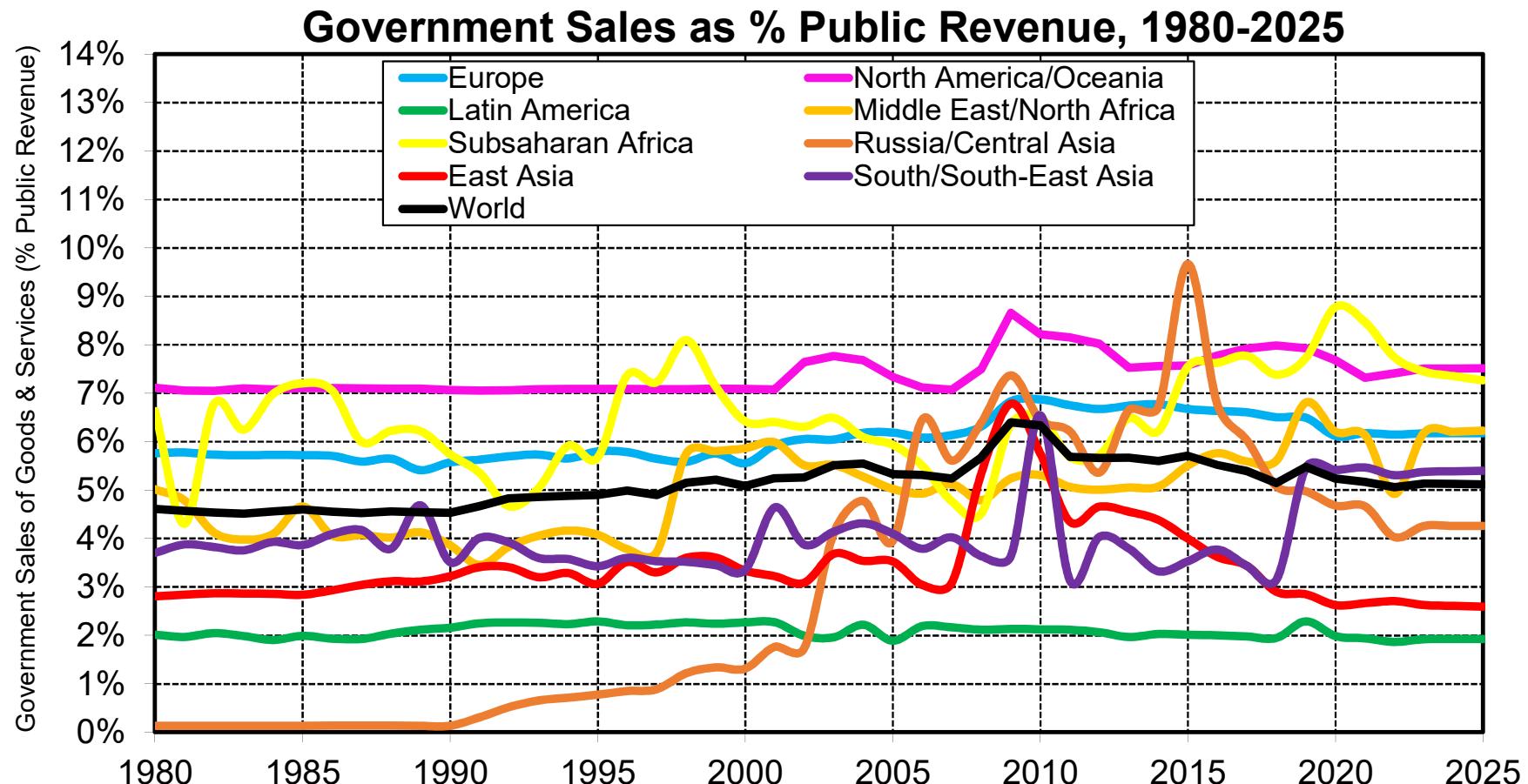


Note. Non-tax public revenue include royalties, fines, charges, etc. and other non-tax compulsory payments received by the government sector. We exclude revenue from sales of goods and services (such as tuitions and fees paid to universities, hospitals and other public entities), which we include in private expenditure and not in public revenue and expenditure. **Sources and series:** wid.world



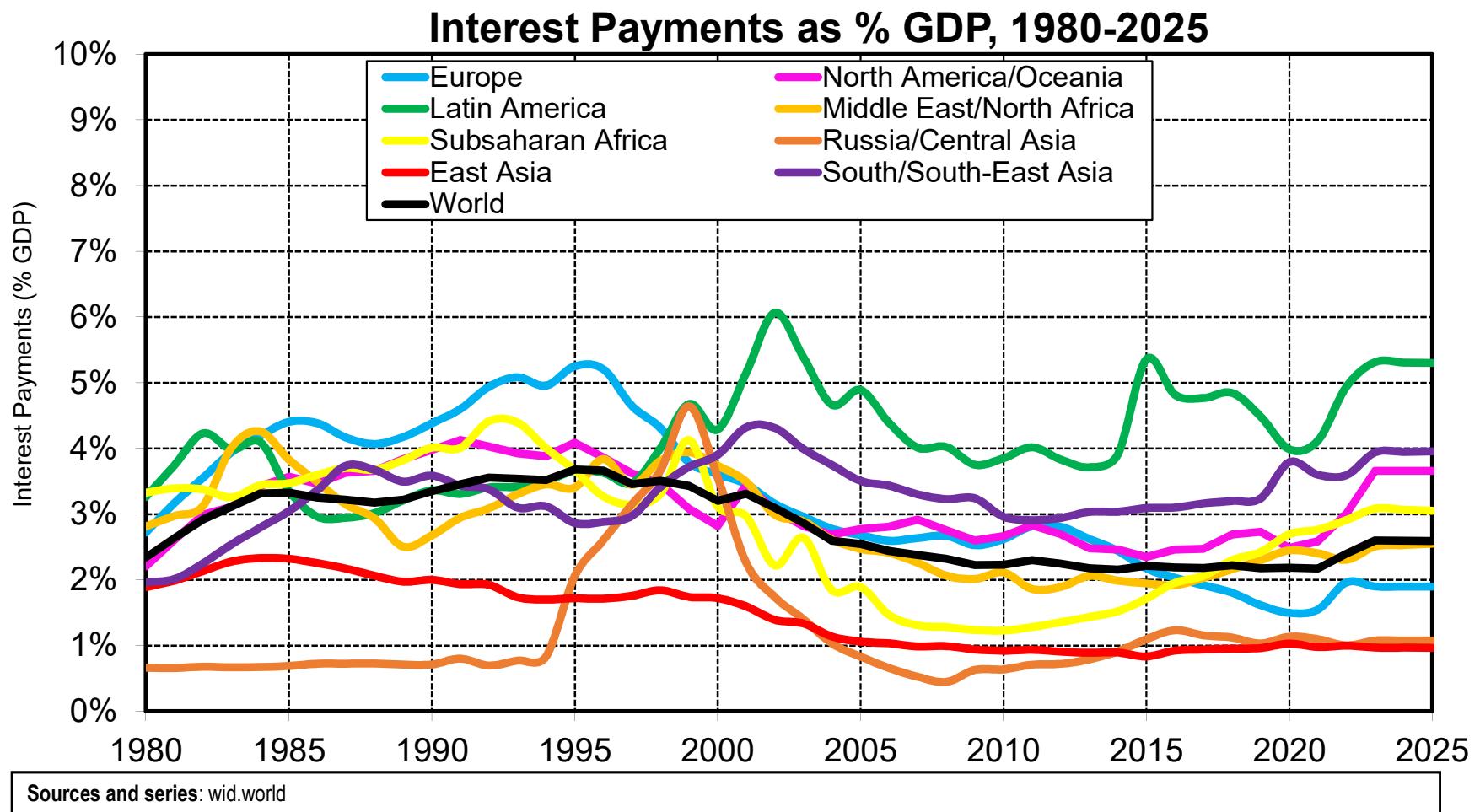


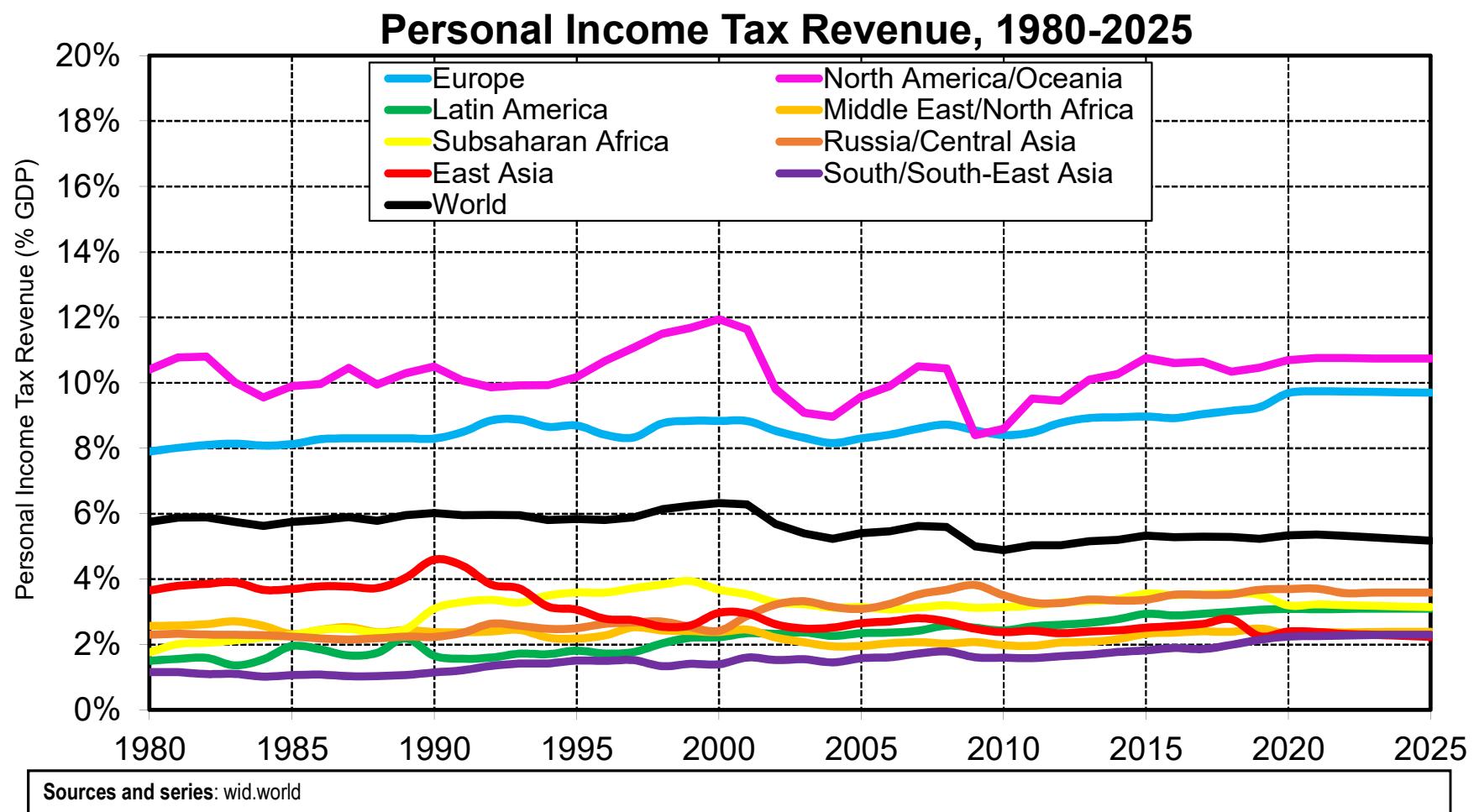
Note. Government sales of goods and services include tuitions and fees paid to public universities, hospitals and other public entities. We include these items in private expenditure and not in public revenue and expenditure. In practice, about one third of government sales correspond to market production and two thirds to non-market production (i.e. at a price that is "not economically significant" according to SNA criteria, typically covering less than half of the costs). **Sources and series:** wid.world

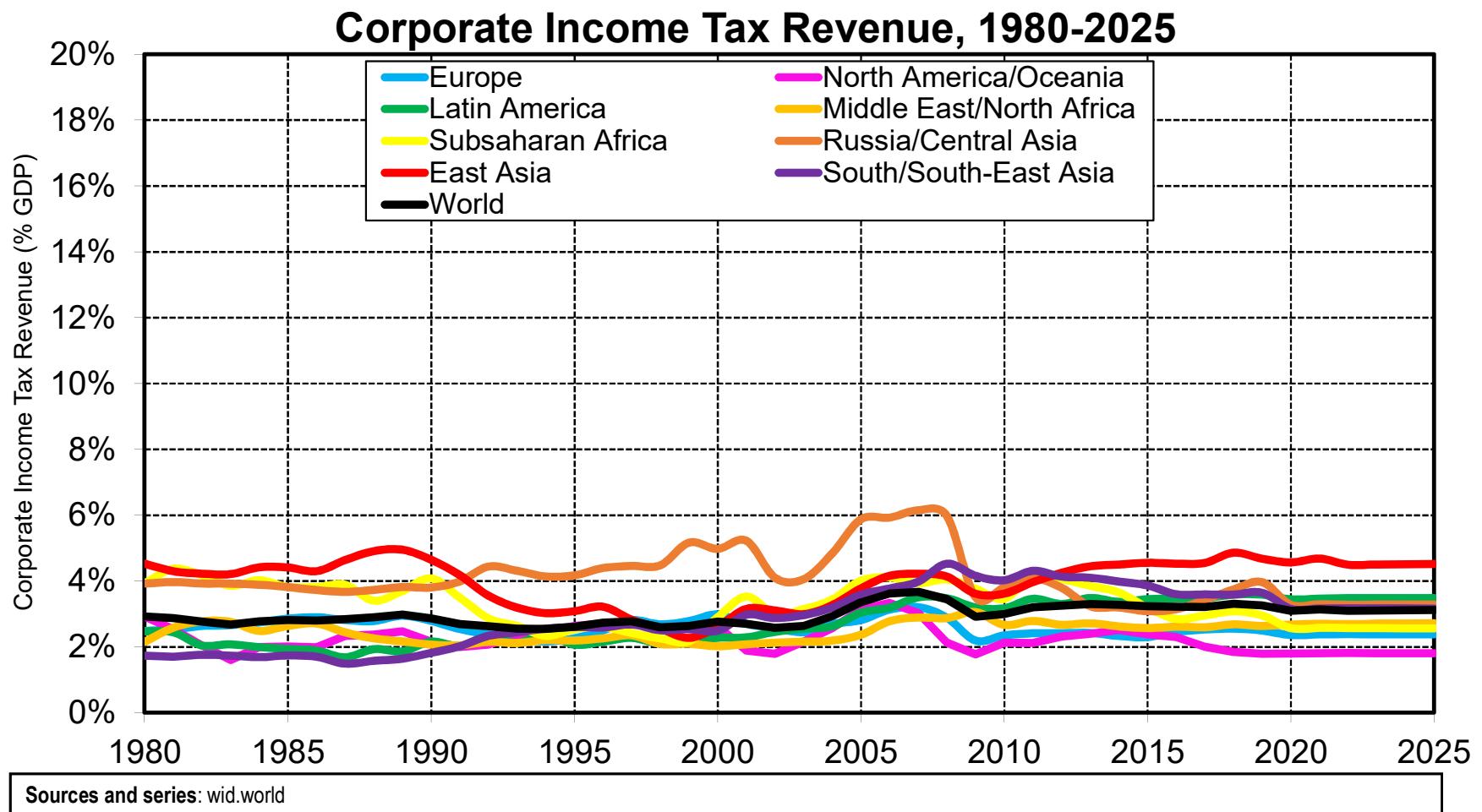


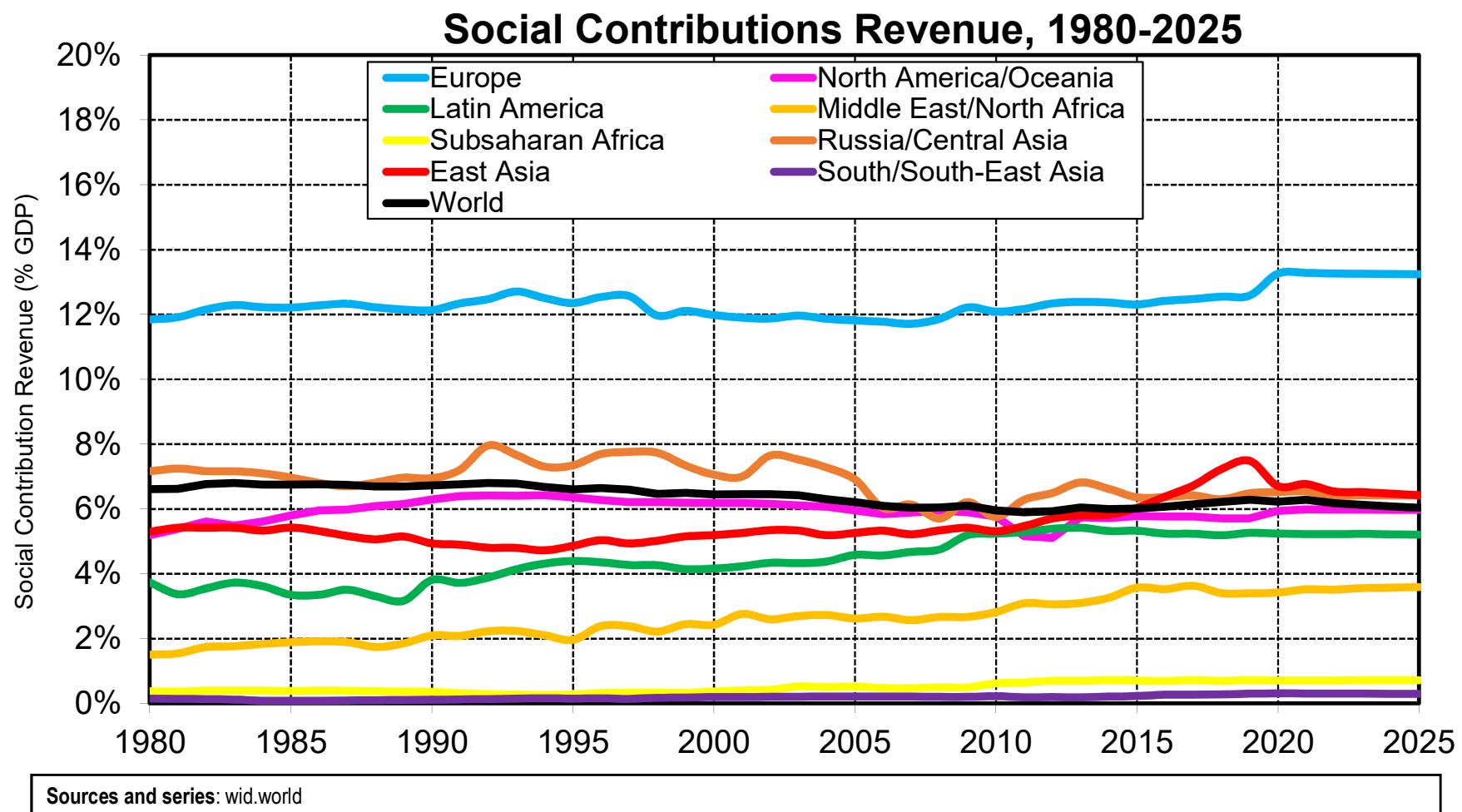
Interpretation. If government sales of goods and services (such as tuitions and fees paid to public universities, hospitals and other public entities) were included in public revenue and expenditure, the latter would increase the latter by about 5-6% at the global level.

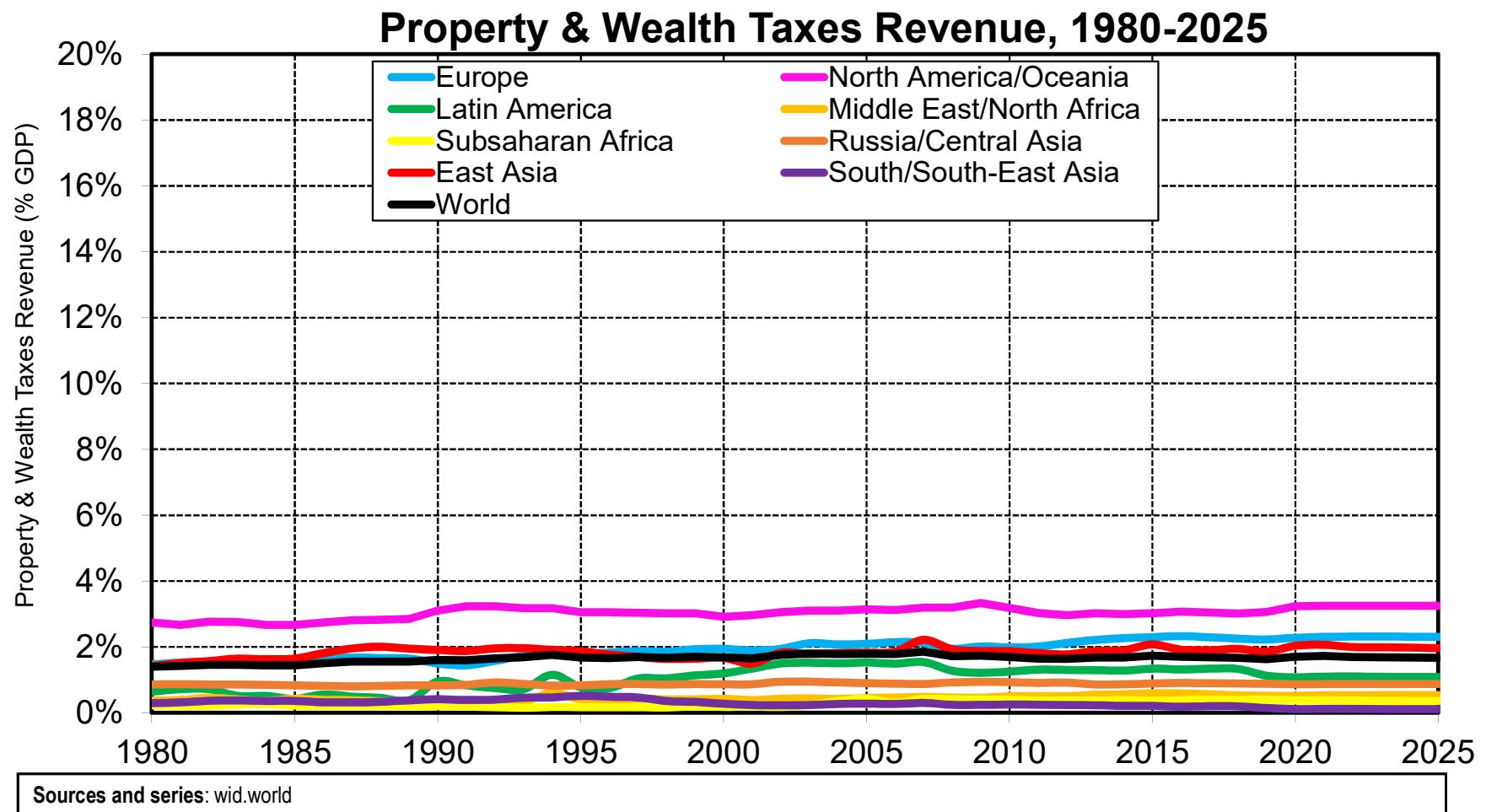
Sources and series: wid.world

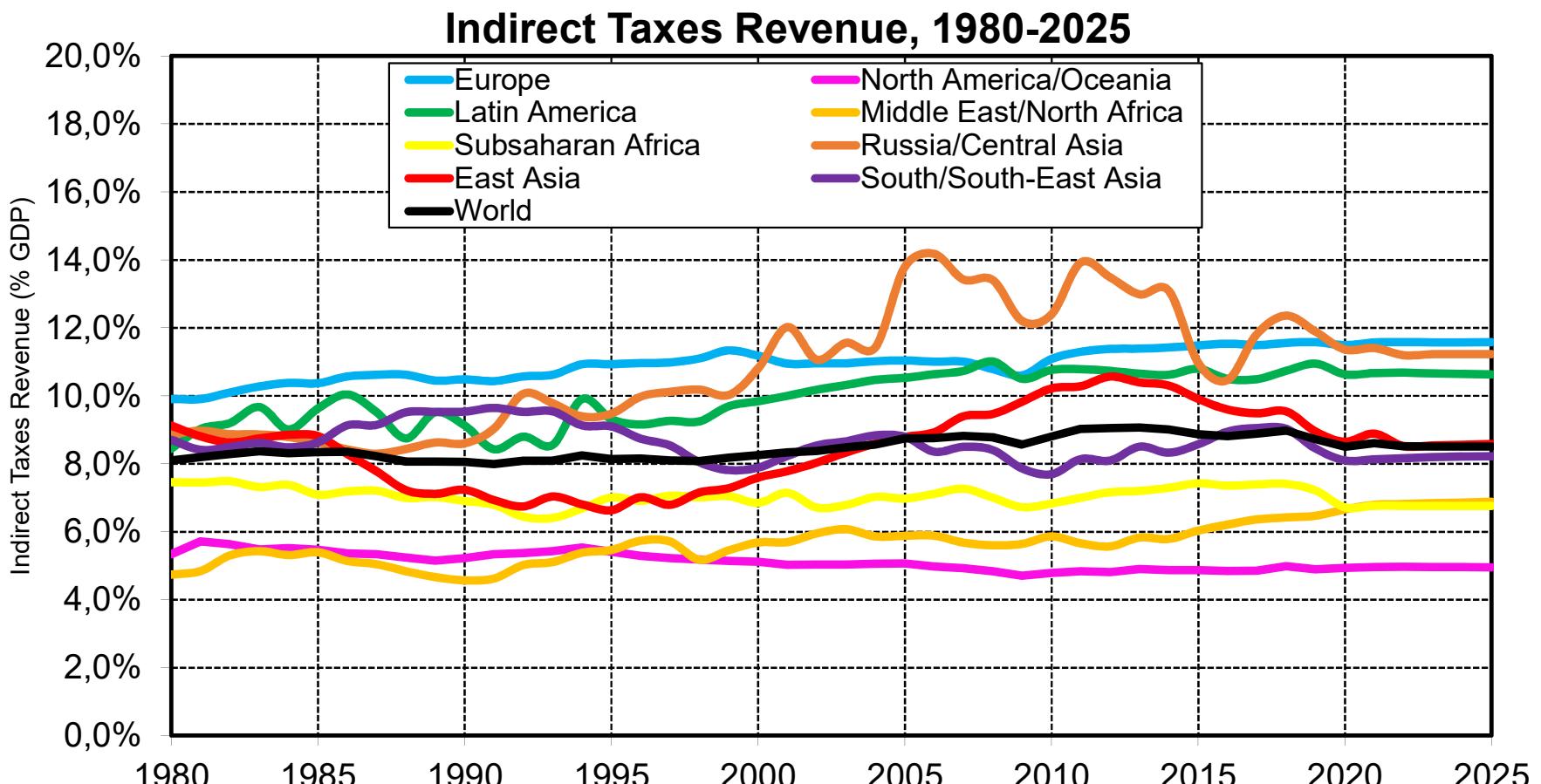




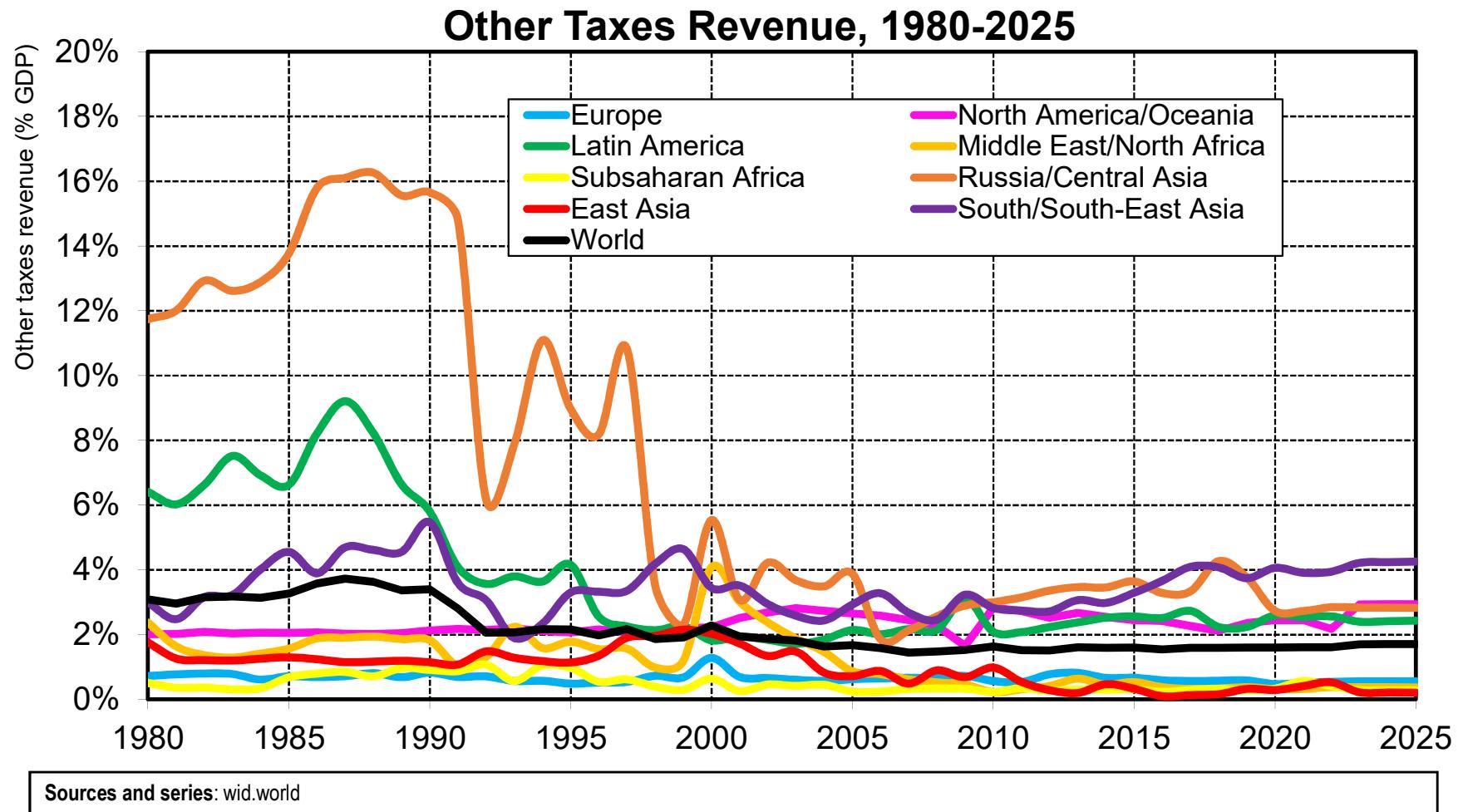


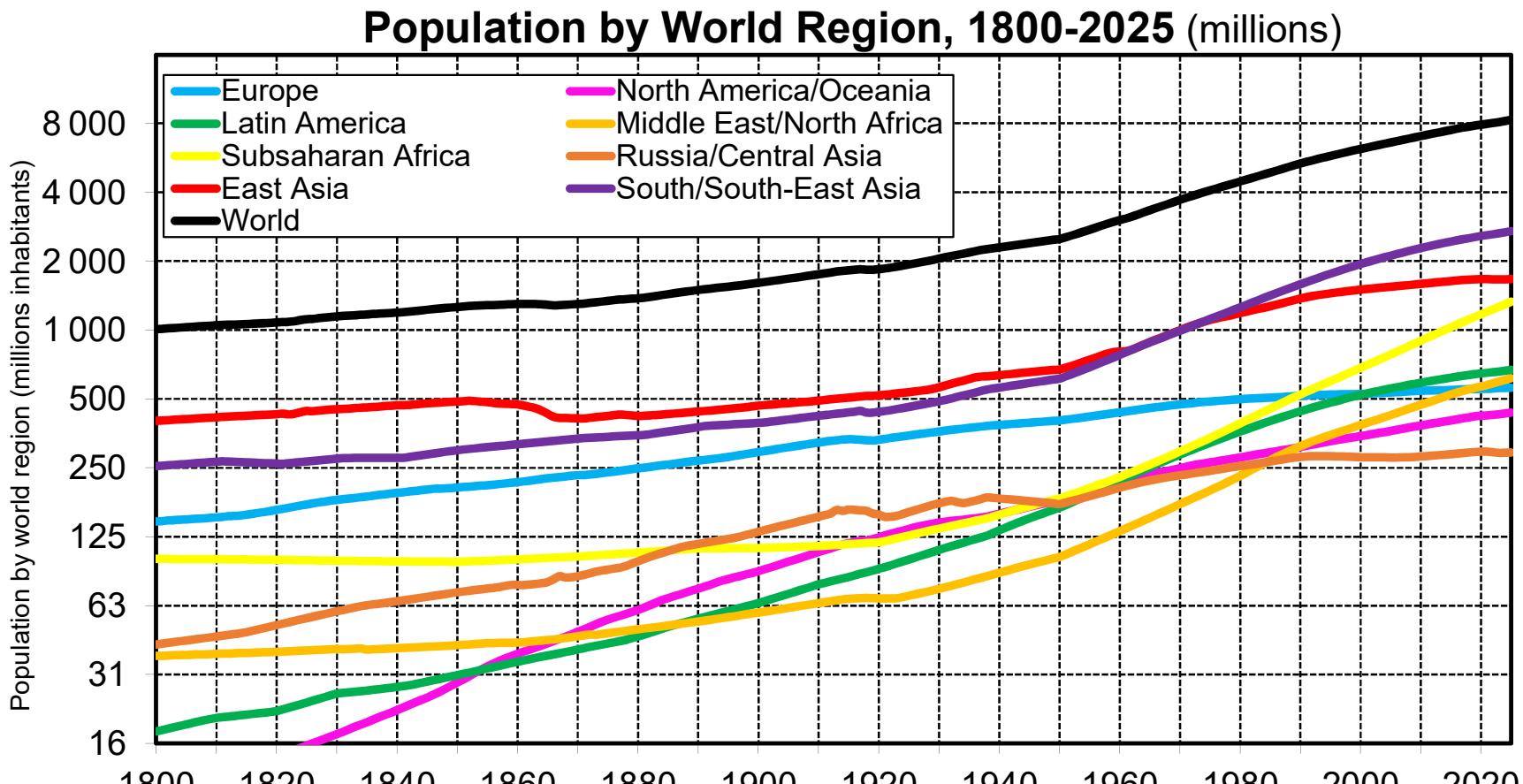






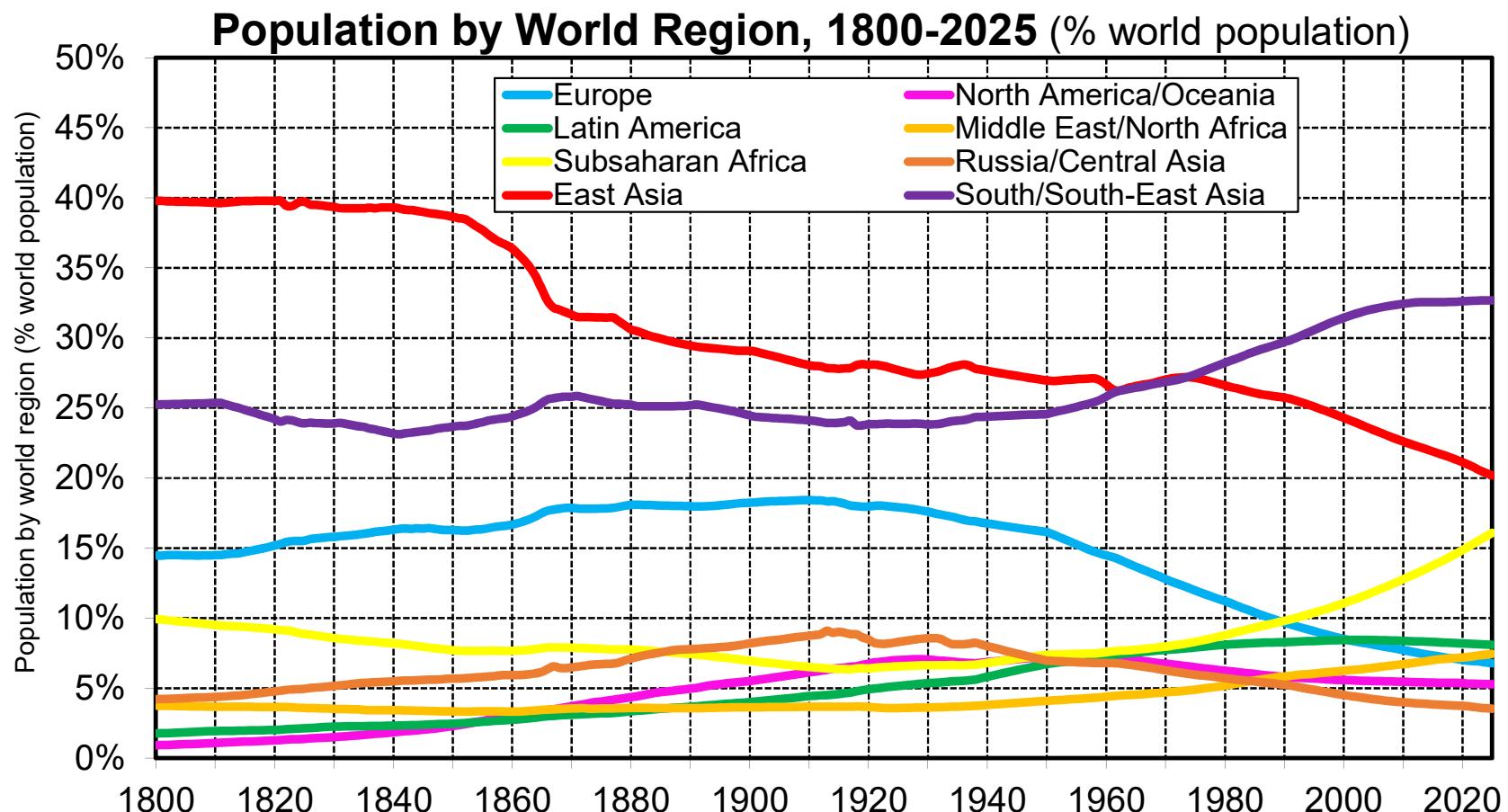
Sources and series: wid.world





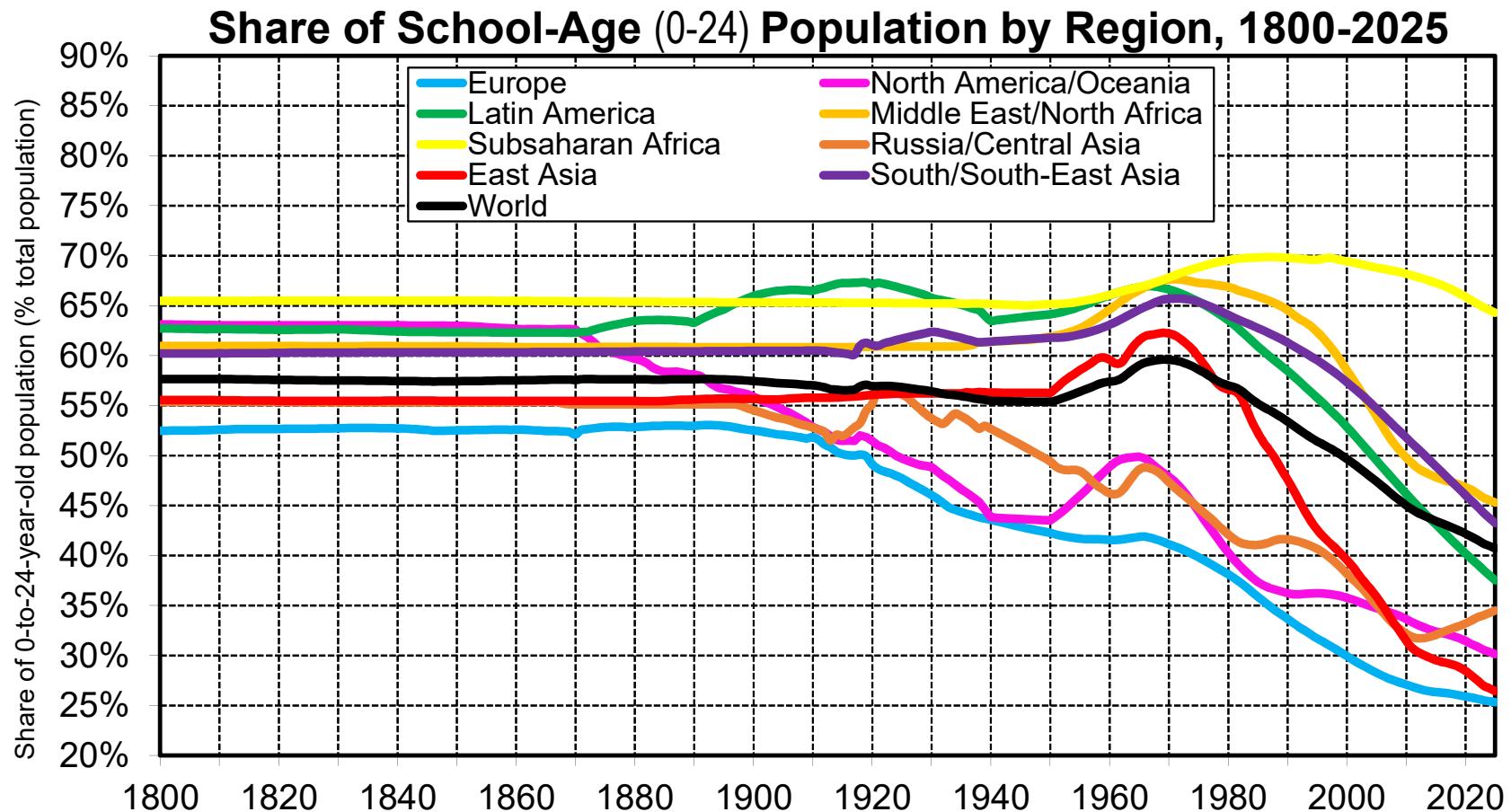
Interpretation. World population increased from about 1 billion inhabitants in 1800 to 8 billion inhabitants in 2025 (including over 2 billion in South/South-East Asia, between 1 and 2 billions in Subsaharan Africa and East Asia, over 500 millions in Europe, Middle East/North Africa and Latin American,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

Sources and series: see [wid.world](#)



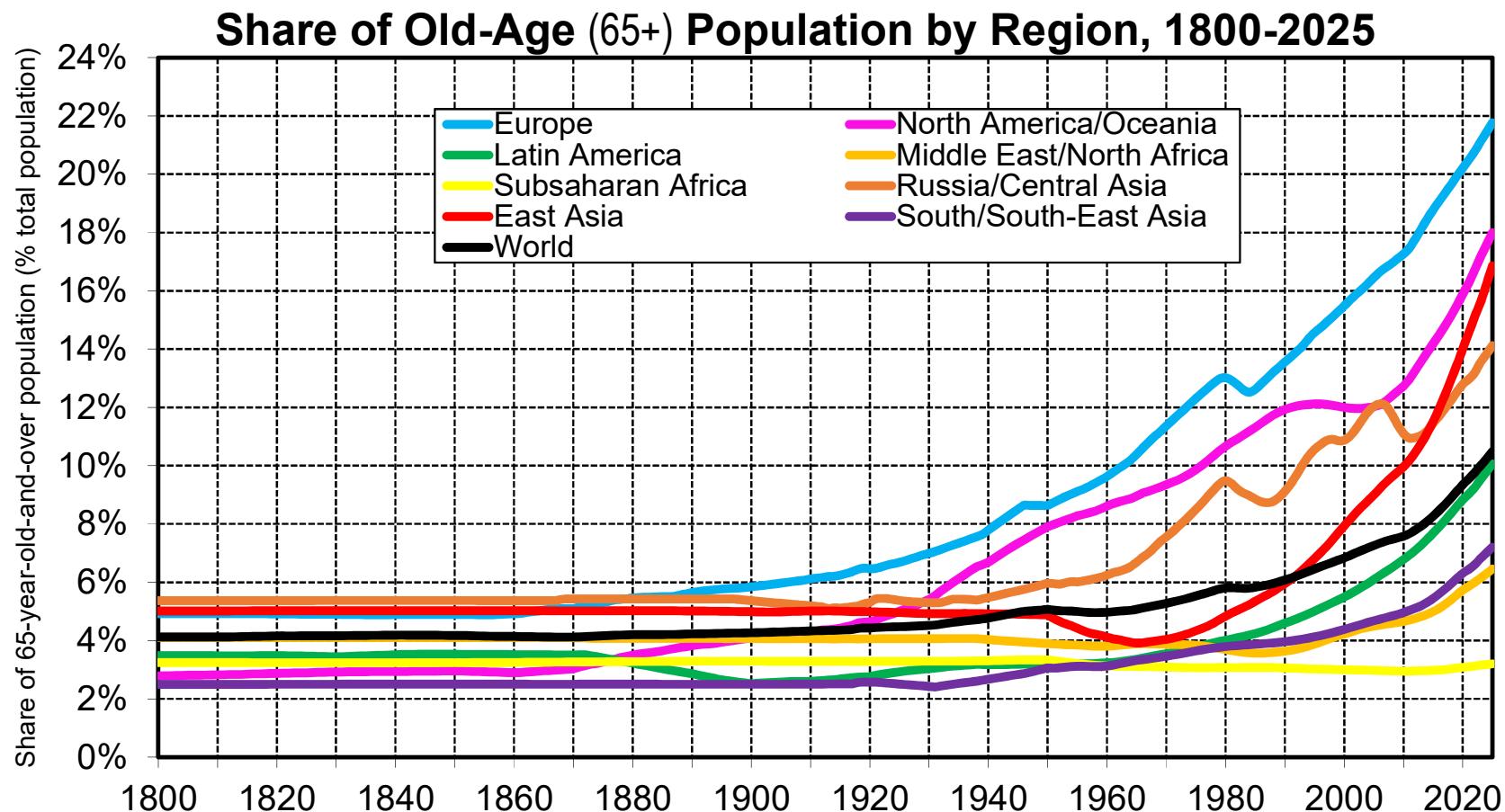
Interpretation. World population increased from about 1 billion inhabitants in 1800 to 8 billion inhabitants in 2025 (including over 2 billion in South/South-East Asia, between 1 and 2 billions in Subsaharan Africa and East Asia, over 500 millions in Europe, Middle East/North Africa and Latin American,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

Sources and series: see [wid.world](#)



Interpretation. The share of school-age population (0-to-24 year-old) varies enormously across world regions in 2025, from 23% in East Asia and 25% in Europe to 64% in Subsaharan Africa. Given that most of education expenditures are devoted to this age group, it is critical to include some age adjustment in order to evaluate the impact of education expenditure.

Sources and series: see [wid.world](#)



Interpretation. The share of old-age population (65-year-old-and-over) varies enormously across world regions in 2025, from 3% in Subsaharan Africa to 22% in Europe. Given that the per capita health expenditure received by this age group is substantially larger than that received by individuals aged 0-to-64 (on average about 3 times larger in recent decades), it is critical to include some age adjustment in order to evaluate the impact of health expenditure. **Sources and series:** see [wid.world](#)