

Extending WID National Accounts Series: Institutional Sectors and Factor Shares

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Abstract. This technical note extends WID national accounts series in order to provide detailed decompositions of gross domestic product and net domestic product by institutional sectors (corporations, government, households) and factor shares (labour income, capital income, mixed income). We provide annual series for all 216 core countries and jurisdictions over the 1980-2023 period as well as for all 57 core territories (48 main countries + 9 subregions) over the 1900-2023 period. Generally speaking, capital shares appear to be substantially larger in poor countries than in rich countries. This could be accounted for by a variety of factors, including low bargaining power of workers in poor countries vis-à-vis domestic and international capital owners.

¹World Inequality Lab (WIL), Paris School of Economics (PSE). All series and figures analyzed in this technical note are available in online file Dietrichetal2025Sectors.xlsx. All series are also available online in the World Inequality Database (wid.world) and will be regularly updated in WID.

1. Introduction

This technical note extends WID national accounts series in order to provide detailed decompositions of gross domestic product and net domestic product by institutional sectors (corporations, government, households) and factor shares (labour income, capital income, mixed income). We provide annual series for all 216 core countries over the 1980-2023 period as well as for all 57 core territories (48 main countries + 9 subregions) over the 1900-2023 period (see Table A0).

The main novelty of our approach is that we attempt to cover all countries and world regions, both in the North and in the South, and to study factor shares in close connection with the decomposition of GDP and NDP by institutional sectors (as defined by official SNA guidelines: corporate sector, household sector, government sector).¹ In contrast, most existing comparative historical studies of capital and labor shares across the world tend to focus on rich countries (see e.g. Bengtsson et al 2018, 2020; Karabarbounis and Neiman 2014, 2024; Piketty 2014; Piketty and Zucman 2014). Available research does suggest there are substantial differences in factor shares between rich and poor countries: labour shares are generally considered to be substantially lower in poor countries than in rich countries, which can be accounted for a variety of factors, including low bargaining power of workers vis-à-vis domestic and international capital owners (see e.g. ILO 2013; Rodriguez and Ortega 2006). However our understanding of factor shares is still very limited, largely due to the lack of satisfactory data.

In order to provide meaningful global comparisons of labour and capital shares, we stress the need to study factor shares together with the structure of production by institutional sectors. In particular, the share of GDP and NDP originating from the household sector (including self-employed individuals) rather than from the corporate or government sector also varies enormously across countries and between the poorest and the richest regions. This can have a very large impact on factor shares, and it is therefore critical to be very clear about what we know on the institutional breakdown of GDP and NDP when we make such comparisons. Unfortunately, many countries do not yet publish detailed GDP breakdown by institutional sectors. When they do so, they often do not go back very long in time. In addition, and maybe most

¹ See United Nations (together with European Commission, IMF, OECD, World Bank), System of National Accounts 2008, New York 2009.

importantly, the way each country applies SNA definitions of institutional sectors (in particular the government sector, but also the household and corporate sectors) or measures consumption of fixed capital is not as homogenous as it could or should be, including when we try to compare advanced European countries.

The purpose of this note is not to propose final series but rather to clarify the extent of what we know and do not know when we try to compare factor shares across countries and world regions. We make transparent and plausible assumptions in order to provide a set of comparable series, but we stress that these series are very uncertain in many ways. They will be regularly revised and improved as more detailed and comparable national accounts series are published by the statistical offices of the various countries and world regions. Generally speaking, outside of Europe and North America/Oceania, we have very few countries with full decomposition of GDP by institutional sector and factor shares before 1970-1980. Regarding the decomposition by institutional sectors, we observe relatively clear and robust patterns over the process of economic development, so that the assumptions that we make about missing countries-years over the 1900-1980 period appear to be reasonable (at least as a first approximation). Regarding the decomposition by factor shares, there does not exist any such pattern, so that the simplified assumptions that we make for missing countries over the 1900-1980 period (on the basis of available historical series in other countries, mostly in Europe and North America/Oceania) are bound to be approximate. These series will be revised and updated accordingly as new historical country series become available.

The rest of this technical note is organized as follows. We start by presenting in section 2 our basic conceptual framework on institutional sectors and factor shares (following SNA guidelines). We then describe our sources and methods in section 3. We present our main results in section 4. Finally, we offer concluding comments in section 5.

2. Institutional Sectors and Factor Shares: Conceptual Framework

Following standard SNA guidelines, the total GDP of a country can be decomposed into three institutional sectors: the corporate sector (including financial and non-financial corporations: S11 and S12), the government sector (S13) and the household sector (including households and non-profit institutions serving households: S14 and S15). Importantly, the government sector is *not* defined by the ownership structure or legal status of the entities under consideration, but rather by the production of non-market goods and services under control of the government (see SNA 2008, p.73-74). Non-market producers are defined by the fact that they provide goods or services for

free or at a price that is “not economically significant”.² “Government control” is defined by combining various criteria, including governance rules and the financing structure.³ As stressed by SNA, these criteria are multidimensional and require careful examination before a decision can be reached.⁴ Whatever the uncertainties, the important point is that a state-owned enterprises (SOEs) that sell at market prices are not part of the government sector and will be treated as part of the corporate sector, even though the corresponding organizations are public entities in the legal sense. Conversely, private organizations receiving the majority of their funding from the government can be treated as part of the government sector. The frontier between household and corporate sectors can also be complicated and “judgmental”. E.g. an individual producer with no formal legal entity can be considered as a quasi-corporation and be treated as part of the corporate sector (rather than the household sector) if it holds separate accounts from the personal account of its owner.

The value added by each sector can itself be divided into the compensation of employees, gross operating surplus, consumption of fixed capital (CFC) and net operating surplus, as well as mixed income from self-employment in the case of the household sector. These items sum up to GDP at factor-price. Adding total production taxes we get total GDP at market prices. This sectoral decomposition follows the “generation of income account” in national accounts. Table A1 shows the decomposition of GDP by sectors including the sub-items and the corresponding SNA code. Following the accounting identities described in Table A1 we calculate the total value added by production sector at factor-price. From this we can calculate (gross and net) capital and labor shares. Following the DINA guidelines (Blanchet et al. 2024) we assign fixed fractions of the mixed income of households as labor income and capital income. One advantage of having the sectoral decomposition is that we can also calculate factor shares within a sector, and in particular the labor and capital shares within the corporate sector.

Table A2 shows the definition of different factor shares. We present factor shares both as share of gross value added and net value added. While series net of depreciation

² Typically, “not economically significant” corresponds to situations where sales revenue cover less than half of the production costs, although this needs to be appreciated over several years. As a general rule, non-market production is then valued at production costs.

³ For instance, a non-profit institution that is “mainly financed by government” may be considered to be “controlled by that government”.

⁴ The decision should be “based on the totality of all indicators” and “will necessarily be judgmental in nature”. See SNA 2008, p.73-74.

might be preferable because capital income used to replace capital cannot be consumed, there exist uncertainties and limited comparability of estimated depreciation rates between countries. As CFC is deducted from capital income, the capital share of gross value added is always larger than the capital share in net value added. To estimate factor shares for the total economy, we assume a gross capital share equal to 40% of gross mixed income (which corresponds approximately to a net capital share of 30% to 35% of net mixed income, given that CFC generally makes about 5% to 10% of gross mixed income. Today we observe a gross capital share in the corporate sector much above 30% in many parts of the world (see below). Assuming the capital share of mixed income to be much lower than the capital share in the corporate sector would lead to a mechanical increase in the capital share of the total economy whenever mixed-income gets replaced by the corporate sector, which we feel would be artificial. We already get part of this effect with our new assumption but in a less extreme manner than with the assumption of a 30-70 split. Generally speaking, we emphasize that these capital-labour splits should be view as approximations. In order to provide more accurate estimates of capital-labour splits of mixed income one would need to use micro data on self-employment and household sector production (including data on the types of labour skills and capital assets used as productive inputs), which is not available in the context of historical comparative national accounts.

3. Data Sources and Methods

3.1. General Data Sources

We use the national accounts series from the World Inequality Database (WID) as described in the DINA guidelines (section 4.1.2.1). The main sources are UN National accounts detailed tables, but also national accounts data from OECD, IMF and WID researchers. Additionally, we use the full sectoral decomposition for all countries covered in Piketty and Zucman (2014), notably the historical series for Britain (1855-), France (1896-) and the US (1929-). For a few countries (China, Russia, Saudi Arabia, Sweden) we include additional data sources into this framework (see section 2.3). Additionally, we add historical CFC series from Bengtsson et al. (2020). These series are harmonized according to the methodology described in the DINA guidelines. For GDP per capita in Euro 2023 PPP we use data from the WID.

3.2. Handling Missing Values

Many countries do not publish all items in their national accounts which are necessary for a full sectoral decomposition of GDP. Table A3 and A4 show the countries for which full sectoral decomposition is available in recent years. We calculate a sectoral decomposition of GDP for all 216 countries in the World Inequality Database from 1980 to 2023 and from 1900 to 2023 for the 57 core territories. The following section describes our imputation steps in the case of missing values. The general idea is to use the relatively clear and robust patterns of a rising share of value added by the corporate sector over the process of economic development. We observe richer countries to have on average a higher share of value added by the corporate sector and a lower share of value-added in the household sector compared to poorer countries.

3.3. Series Covering All 216 Core Countries 1980-2023

First, if countries do report some, but not all necessary national account items, we use the values of Bachas et al. (2022), who obtain the missing national accounts items for 150 countries from 1965 based on a regression on NNI per capita. To get the full sectoral decomposition, as defined by official SNA guidelines, the compensation of employees paid by households is missing. We calculate the total compensation of employees paid by the private sector by deducting compensation of employees paid by the government and net foreign labor income from the total compensation of employees received. We split this remaining privately paid compensation of employees based on the last year with available data, or, if this is never observed, according to relative size of mixed income and corporate profits as proxy (30% of the mixed income/corporate profit). In any case the compensation of employees paid by households is usually small (1% to 5% of GDP) and this split does not affect the capital share of the total economy.

For countries not covered by Bachas et al. (2022) or those where all years are based purely on imputations, we use regional averages of observations post 1950 based on five GDP per capita bins to assign sectoral value added. If in a region there is no data for the highest or lowest GDP per capita bin we use the shares from the second highest/lowest bin. Table A5 shows these regional averages for all eight regions. If available, we keep the share of wages paid by the corporate or household sector constant for each country. If they are never observed in a country, we use the regional average shares.

3.4. Series Covering All 57 Core Territories 1900-2023 (48 Main Countries + 9 Residual Regions)

For the first half of the 20th century data on GDP by institutional sector is very rare. However, in all countries with data we observe that increasing GDP per capita comes together with a decline in the value added by the household sector and the rise of corporations. We use this regularity to estimate sectoral shares for all core territories with missing data from 1900 to 1979. Based on historical series for France, USA, United Kingdom and Sweden, we provide estimates on sectoral GDP by three GDP per capita bins. These values have the following trends that we observe in historical data: a decrease in the production by the household sector, an increase in the corporate sector, as well as increase in the government sector and an increase in CFC. We use these values to assign a sectoral decomposition for all 57 core territories with missing data in 1900 and 1930 based on their GDP per capita and interpolate linearly.

To estimate historical factor shares, we further assume a constant gross profit share in the corporate sector of 40% and a constant net profit share in the corporate sector of 35% of corporate GVA for countries in Europe, North America & Oceania, East Asia or Russia & Central Asia. For countries in South & South-East Asia, Subsaharan Africa, Latin America or MENA we assign a gross corporate sector gross profit share in the corporate sector of 55% and a constant net corporate profit share of 50% of corporate GVA. We do so to account for the very large regional differences in capital shares within the corporate sector in recent decades (see Figures H2a-H2b below). Tables A6a and A6b show the sectoral decomposition we use for the historical imputation. For Russia & Central Asia post 1917 we follow a different strategy due to the low self-employment under soviet rule (see section 3.6). While this strategy is imperfect, we prefer this simple transparent assumption to more complex and “black-box” procedures. These estimates will be revised and improved as more country studies become available.

3.5 Consumption of fixed capital (1800-2023)

So far, WID covered CFC values for all 216 countries from 1950 to today, and longer for single other countries. If not available the CFC series are imputed based on GDP per capita levels, including a sectoral decomposition (DINA chapter 4.1.2.2). To extend the CFC series for the 57 core territories until 1800 we proceed by the following steps.

From 1950 to 2023 we use the CFC data currently available in WID. We drop implausibly low CFC values of less than 5% after 1980 and less than 4% between 1950 and 1980. From 1900 to 1950 we use CFC based on GDP per capita as described in the previous section. From 1800 to 1900 we assign CFC values based on the region in 1800 and 1880: 6% for Europe; 5% for North America & Oceania, East Asia, Latin America, Russia & Central Asia; and 4% for Sub-Saharan Africa, South & South-East Asia, MENA. If the last observed value is lower than the imputed value in 1800 and 1880 we keep the level constant. We interpolate linearly between the values.

3.6. Country Exceptions

Russia and Soviet Union

For Russia from 1981 to 2014 we rely on the sectoral GDP decomposition from Novokmet et al. (2018) with some adjustments. From 1961 to 1980 and 2012-2015 we use their CFC/GDP series, but we replace the series from 1980-2012 by the regional average of “Other Russia and Central Asia”, because the official series seems unrealistic reaching values of more than 25% of GDP. Before 1987 we set production taxes to 7% of GDP.

For 1918 to 1980 we do not apply the historical imputation method described above, because self-employment and household production were very low under soviet rule. Instead, we keep the sectoral shares constant from 1930 to 1981 and interpolate linearly from 1918 (based on the method described in 2.4) to 1930. We set the value added of the government sector to 15%, the household sector to 8%, and the corporate sector to 77% of factor-price GDP from 1930 to 1981. We keep the gross profit share of corporate net value added from 1981 constant until 1930. Throughout we assume a share of 5% of gross operating surplus of households, which is missing in the sectoral GDP decomposition.

China

For China 1991 to 2014 we rely on Piketty, Yang and Zucman (2019), who decompose national income by institutional sector. To fit their data in our framework we add household agriculture and household individual business together as mixed income. Only compensation of employees paid by households are not recorded. We assume 3% of value added of household agriculture and household individual business to be paid directly as wages.

Saudi Arabia

The UN national accounts of Saudi Arabia show close to zero mixed income. For 2002 to 2009 we use data from publications of the national statistical institute, which report about 15 percent of mixed income. They do not report operating surplus for the household sector which we assume to be 5% of GDP and deduct from mixed income. We do not use values from Bachas et al. (2022) for Saudi Arabia.

Sweden

For Sweden we use historical national accounts data by Edvinsson (2005), who calculates historical national accounts for Sweden from 1850. He calculates “imputed labor income from self-employment”. While it is not 100% transparent how he calculates this labor income from self-employment, he uses self-employment and wages by industry. We use the 70-30-split to derive total mixed income from the imputed labor income.

New Zealand

Official data from New Zealand does not report mixed income separately, but it is included in corporation sector (see WID Issue Brief 2020-07). We take the Australian mixed income share and deduct from corporation sector.

4. Main Trends in the Final Series

All series are available in WID and in the xlsx file Dietrichetal2025Sectors.xlsx, which also includes all the figures (with numbering) which we briefly describe below.

We first describe the evolution of **per capita GDP** from 1800 to 2023 in Figure B1, which basically follows the updated WID GDP series (Nievas and Piketty 2025). Note that GDP generally represents about 50% of total output (i.e. about 50% of total output is used as **intermediate input**), with important variations over time and across regions, in relation to the different production structure (see Figure B2). In the present work we do not look at GDP decomposition by production sectors (agriculture, manufacturing, etc.), as we focus on GDP decomposition by institutional sectors (government, corporations, household) and factor shares. In future research it would be interesting to further study the interaction between production and institutional sectors.

We also provide series on the evolution of **consumption of fixed capital (CFC)** from 1800 to 2023 (see Figure C1). We observe a global rise in CFC over the past two centuries: CFC increased from about 5% in 1800 to about 15% today, reflecting the transition from agriculture (with relatively low CFC rates) to manufacturing (higher CFC

rates) and the rise of equipment with faster depreciation and capital obsolescence (e.g. computers). The rise of **production taxes** over the 1900-2023 period (see Figure C2) reflects a very different process (i.e. it reflects the general rise of government).

We then move the decomposition of GDP by institutional sectors and factor shares. The country with the longest available time series (1855-2025) is the United Kingdom, with a very clear historical pattern indicating the rise of the government sector, and most importantly the gradual replacement of the household sector by the corporate sector (see Figure D1). We do not have similarly long series for other European countries, but whenever we have some estimates we do observe a similar pattern over the 1900-2025 period (see Figure D2).

At the world level, we find that the share of value added by the **government sector** increased from around 5% of factor-price GDP to about 13% between 1900 and 1980. Since the 1970s-1980s the government share is approximately stable (see Figures E1a-E1c). The world wars stand out due to large military sector. Today, the regional variation is rather small with most regions having an average size of the government sector of 12% to 15% of GDP. Country variation is still large. In some European countries like Sweden or France the Value added of the government sector accounts for up to 20% of GDP, while in Japan, China, and Germany the government accounts for about 10% of GDP.

Generally speaking, the size of the **corporate sector** increases with economic development and replaces the households sector (see Figures E2a-E2c). On the world level the corporate sector increased from about 32% of GDP in 1900 to 60% of GDP in 1980 and is rather stable since then. In Subsaharan Africa the corporate sector is significantly lower with about 43% in recent years. During the Soviet era the corporate sector was very large because there was very little or no self-employment.

Conversely, we find a long-term decline in the size of the total **household sector** from more than 60% of GDP in 1900 to 28% today (see Figures E3a-E3c). This trend is driven by a decline in mixed-income as well as wages paid by the household sector, while housing services increased in most regions since the 1980s (see Figures E4a-E4b, E5 and E7). Today, as a share of GDP, the household sector is largest in Subsaharan Africa and smallest in Europe and Russia/Central Asia.

The decomposition of GDP into institutional sectors can also be extended to the decomposition of NDP into institutional sectors, using the series on **CFC by sector** reported on Figures F1-F4.

We now move to the **capital share within the corporate sector**. The longest time series we have are for the UK and France over the 1800-2025 period. We observe very large historical variations for these two countries: over the past two centuries the gross corporate capital share varies from 10%-15% to 50%-55%, while the net corporate share varies from slightly negative levels to 45%-50% (see Figures H1a-H1b).⁵ When we introduce other world regions we observe even larger variations (see Figures H2a-H2b and H3a-H3b for gross labour and capital shares in gross corporate value-added; see Figures H4a-H4b for corporate CFC and Figures H5a-H5b and H6a-H6b for net labour and capital shares in net corporate value-added). In recent decades, North America/Oceania and Europe have the lowest capital share in the corporate sector of about 30% of corporate net value added. In South & South East Asia, Sub-Saharan Africa and Latin America it is about 50%, and in MENA about 65% of corporate net value added (partly due to very capital-intensive energy sector, though we also observe very high capital shares in non-oil-intensive countries).⁶ On the country level India stands out with a corporate net capital share of 65% in 2007 declining to 55% in the early 2020s, which is still very large. While the corporate sector is relatively small in India as compared to other countries (see Figure E2b), this is not true for South & South-East Asia as a whole (see Figure E2a), so this cannot really explain why the capital share is so much larger in South & South-East Asia as compared to Europe or North America/Oceania. The same remark holds for Latin America and Middle East-North Africa.⁷

We stress that there are also some variations between countries that are due to large variations in CFC levels (e.g. substantially larger corporate CFC in France or Japan than Germany or the UK, resulting in substantially smaller net capital shares in the

⁵ Each of the sub-periods of rising or declining capital shares described on these figures would deserve a detailed analysis. See e.g. Allen (2009) for a study of the famous “Engel pause”, i.e. the stagnation of wages between 1800-1810 and 1860-1870 in Britain and France, which generated an important rise in the corporate capital share that is to a large extent at the origin of the development of the modern labour movement. For an overall discussion of these long-term evolutions, see Piketty (2014, chapter 6).

⁶ Note also that the capital stock (relative to GDP) do not seem particularly high in regions with very high capital shares like MENA or South & South East Asia. See Bauluz et al (2024). In other words, the higher capital shares seem primarily to reflect higher rates of return, at least as first approximation.

⁷ This is also consistent with work based upon industrial surveys suggesting that higher capital shares in poor countries are also observed for given industrial sectors. See Rodriguez and Ortega (2006).

former as compared to the latter). Some of these differences might reflect different methods used in national statistical offices, at least in part.

Finally, the **total capital share of the total economy** (gross or net of CFC) increased in most region since the 1980s (see Figures I1a-I1b, I2a-I2b, I3a-I3b, I4a-I4b). There are again very large regional variations. We observe the increasing capital share in the US. However North America/Oceania and Europe still have a low capital share compared to other regions. MENA has the highest capital shares, driven by oil producing countries (but not only). The variations reflect not only the changes in factor shares in the corporate sector, but also the evolution of the relative importance of the three institutional sectors (corporate, government, household) and the changing importance of the value of housing services (which have increased in most countries in recent decades).

5. Concluding Comments

The series presented in this technical note shows very large variations in the decomposition of GDP by institutional sectors and factor shares over time and across regions. Generally speaking, capital shares generally appear to be substantially larger in poor countries than in rich countries. This finding appears to be robust, in the sense that it is not an artefact due to different relative importance of the various institutional sectors: it holds within the corporate sector, and it also holds when comparing poor and rich world regions with similar shares of GDP originating in the corporate sector. This finding could be accounted for by a variety of factors, including low bargaining power of workers in poor countries vis-à-vis domestic and international capital owners. Such an analysis is far beyond the scope of the present technical note, but we very much hope that it will help stimulate further research in this area.

We should also stress that we still face many data limitations when comparing institutional sectors and factor shares over time and across countries. The series presented here are not meant to be final or satisfactory in any meaningful sense. They will be revised and updated as new and hopefully more comparable country estimates are released by national statistical institutes and international organizations.

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Table A0. Geographical Coverage: Definition of Core Territories Used for Historical Series	
57 core territories = 48 main countries + 9 residual regions	
East Asia (5)	China, Japan, South Korea, Taiwan 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, Canada, Australia, New Zealand Other NAOC
Russia/ Central Asia (2)	Russia Other RUCA
South/South-East Asia (9)	Bangladesh, 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. In the context of the historical series described in this technical note, the world is decomposed into 57 core territories (48 countries + 9 residual regions). See Nievas and Piketty (2025). We provide complete historical series over 1900-2023 period for all 57 core territories for institutional sectors and factor shares, and complete series over 1980-2023 for all 216 core countries.	

Table A1: GDP Decomposition by Institutional Sector

WID code	Description	SNA code	SNA sector
gdpro	(=) GDP at market prices	B1g	Total Economy (S1)
ptxgo	+ net taxes on products and production	D2-D3	
gvato	+ GDP at factor-price	B1g	
gvago	+ GVA of the Government	B1g	General Government (S13)
ceugo	+ Compensation of Employees	D1	
gsrgo	+ Gross operating surplus	B2g	
nsrgo	+ Net operating surplus (=0)	B2n	
cfcgo	+ CFC	P51c	
gvaco	+ GVA of the Corporate Sector	B1g	Corporations (S11+S12)
ceuco	+ Compensation of Employees	D1	
gsrco	+ Gross operating surplus	B2g	
nsrco	+ Net operating surplus	B2n	
cfcco	+ CFC	P51c	
gvahn	+ GVA of the Household Sector	B1g	Households & NPISH (S14+S15)
ceuhn	+ Compensation of Employees	D1	
gmxhn	+ Gross Mixed Income	B3g	
nmxhn	+ Net mixed income	B3n	
ccmhn	+ CFC	P51c	
gsrhn	+ Gross operating surplus	B2g	
nsrhn	+ Net operating surplus	B2n	
ccshn	+ CFC	P51c	

Note: The decomposition follows the "Generation of Income Account" of the standart of national accounts (SNA). We group households and non-profit insitutions serving households (NPISH) into one sector because many countries do not report them seperatly and NPISH are usually very small (<< 5% of GDP).

Table A2: Factor shares

Description	Calculation	SNA sector
Capital share in the total Economy	$= (\text{gsrco} + \text{gsrhn} + \text{gsrgo} + 0.4 \cdot \text{gm x hn}) / \text{gvato}$	Total Economy (S1)
Labor share in the total Economy	$= (\text{ceugo} + \text{ceuco} + \text{ceuhn} + 0.6 \cdot \text{gm x hn}) / \text{gvato}$	
Capital share in the total Economy net of CFC	$= (\text{nsrco} + \text{nsrhn} + \text{nsrgo} + (0.4 \cdot \text{gm x hn} - \text{ccmhn})) / (\text{gvato} - \text{confc})$	
Labor share in the total Economy net of CFC	$= (\text{ceugo} + \text{ceuco} + \text{ceuhn} + 0.6 \cdot \text{gm x hn}) / (\text{gvato} - \text{confc})$	
Capital share in the corporate sector	$= \text{gsrco} / \text{gvaco}$	Corporations (S11 + S12)
Labor share in the corporate sector	$= \text{ceuco} / \text{gvaco}$	
Capital share in the corporate sector net of CFC	$= \text{nsrco} / (\text{gvaco} - \text{cfcco})$	
Labor share in the corporate sector net of CFC	$= \text{ceuco} / (\text{gvaco} - \text{cfcco})$	
Note: Description of codes in table A1. For factor shares in the total economy we apply a fixed share of 40% of gross mixed income as capital income and 60% as labor income. The capital share in net mixed income depends on CFC of mixed income and will usually be around 30% to 35%.		

Table A3. Data Availability for Decomposition by Institutional Sectors (Core Territories)

<div> <div>Countries with full decomposition (incl. within household sector) available for at least some years in 2010-2025 in UN SNA database or in official country national accounts (first available year)</div> <div> <div>Countries with incomplete decomposition available for at least some years in 2010-2025 in UN SNA database or in official country national accounts</div> <div>Countries with no decomposition available</div> </div> </div>			
East Asia (5)	China(1992)	Japan (1980), South Korea'	Taiwan
Europe (11)	Britain (1855), Denmark (1995), France (1896), Italy (1980), Germany (1992) Netherlands (1980), Norway (1978), Spain (1995), Sweden (1993)		
Latin America (6)	Mexico (1993), Brazil*(1995) Colombia*(1994), Chile(1996)	Argentina	
Middle East/ North Africa (8)	Iran (1996), Egypt*(1996) Saudi Arabia (2002), Turkey (2009)	Morocco'	UAE, Algeria
North America/ Oceania (5)	Canada (1960), USA (1929), Australia (2000)	New Zealand'	
Russia/ Central Asia (2)	Russia (2010)		
South/South-East Asia (9)	Indonesia (2016)	India', Philippines', Thailand	Bangladesh, Myanmar, Pakistan, Vietnam
Sub-Saharan Africa (11)	Niger* (1995)	Ivory Coast, Kenya South Africa'	Nigeria, Rwanda

Note: * Except for decomposition of CFC by institutional sector. ' Only the HH split mixed-income housing is missing. Other cases of incomplete data include labor compensation not split between corporate and household.

Table A4. Data Availability for Decomposition by Institutional Sectors (Other Core Countries)

Countries with full decomposition (incl. within household sector) available for at least some years in 2010-2025 in UN SNA database or in official country national accounts (first available year)		Countries with incomplete decomposition available for at least some years in 2010- 2025 in UN SNA database or in official country national accounts
East Asia	Mongolia (2000)	
Europe	Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic Estonia, Finland (1974), Greece Hungary, Iceland, Ireland, Latvia, Lithuania, Luxemburg Portugal, Serbia, Slovakia, Slovenia, Switzerland (if not specified mostly from 1995)	Armenia, Bulgaria, Moldova, Malta Poland, Romania
Latin America	Aruba (1995), Costa Rica (2017), Honduras (2000), Nicaragua (2006), Dominican Republic (1991) Paraguay (2008), Peru (2007), Uruguay (2012) El Salvador (2014), Venezuela (1997), Guatemala (2001)	Bolivia, Ecuador
Middle East/ North Africa		Bahrain, Israel, Kuwait Qatar, Tunisia
North America/ Oceania	Palau (2000)	Bermuda, Micronesia
Russia/ Central Asia	Azerbaijan (1990), Belarus (1990), Ukraine (1989) Uzbekistan (2010), Kyrgyzstan (1990), Kazakhstan (1990)	
South/South-East Asia	Sri Lanka (2015), Malaysia (2006)	
Sub-Saharan Africa	Botswana (1992) Senegal (2014) Mozambique (1996)	Burkina Faso, Cameroon, Guinea Mauritius, Senegal

Table A5: Regional Sectoral Averages by GDP per capita

Region	GDP per Capita range (2023 Euro PPP)	CFC	Production Taxes	GVA of Government	GVA of corporations	GVA of mixed income	GVA of household OS (housing)
East Asia	0_2500	9%	7%	9%	51%	30%	3%
	2500_5000	12%	10%	8%	42%	35%	5%
	5000_10000	11%	12%	8%	51%	24%	6%
	10000_25000	13%	8%	8%	60%	19%	6%
	above_25000	15%	8%	9%	69%	7%	7%
Europe	0_2500	8%	12%	8%	39%	37%	4%
	2500_5000	11%	12%	8%	39%	37%	4%
	5000_10000	11%	12%	11%	53%	18%	6%
	10000_25000	14%	11%	13%	55%	15%	6%
	above_25000	16%	11%	14%	58%	11%	5%
Latin America	0_2500	8%	9%	13%	38%	35%	5%
	2500_5000	7%	10%	12%	43%	29%	6%
	5000_10000	9%	9%	11%	49%	25%	6%
	10000_25000	11%	9%	11%	58%	15%	7%
	above_25000	12%	12%	11%	63%	8%	5%
MENA	0_2500	5%	11%	15%	36%	32%	6%
	2500_5000	7%	9%	14%	42%	29%	7%
	5000_10000	7%	9%	13%	48%	23%	7%
	10000_25000	9%	9%	12%	54%	17%	9%
	above_25000	9%	1%	15%	75%	4%	4%
NAOC	0_2500	8%	15%	13%	46%	23%	3%
	2500_5000	9%	7%	29%	38%	22%	5%
	5000_10000	11%	10%	13%	49%	22%	7%
	10000_25000	14%	9%	14%	57%	15%	6%
	above_25000	15%	10%	12%	59%	13%	6%
Russia & Central Asia	0_2500	15%	10%	9%	38%	38%	5%
	2500_5000	13%	11%	10%	43%	30%	6%
	5000_10000	14%	12%	10%	53%	22%	3%
	10000_25000	13%	12%	10%	60%	14%	4%
	above_25000	12%	11%	13%	62%	9%	5%
South & South-East Asia	0_2500	7%	8%	12%	37%	40%	4%
	2500_5000	9%	9%	10%	40%	35%	6%
	5000_10000	10%	8%	9%	50%	26%	7%
	10000_25000	12%	9%	9%	60%	14%	8%
	above_25000	16%	10%	12%	67%	4%	7%
Sub-Saharan Africa	0_2500	7%	9%	12%	30%	45%	5%
	2500_5000	9%	10%	11%	39%	35%	5%
	5000_10000	11%	10%	13%	52%	19%	6%
	10000_25000	13%	12%	11%	57%	13%	7%
	above_25000	9%	20%	5%	57%	9%	9%

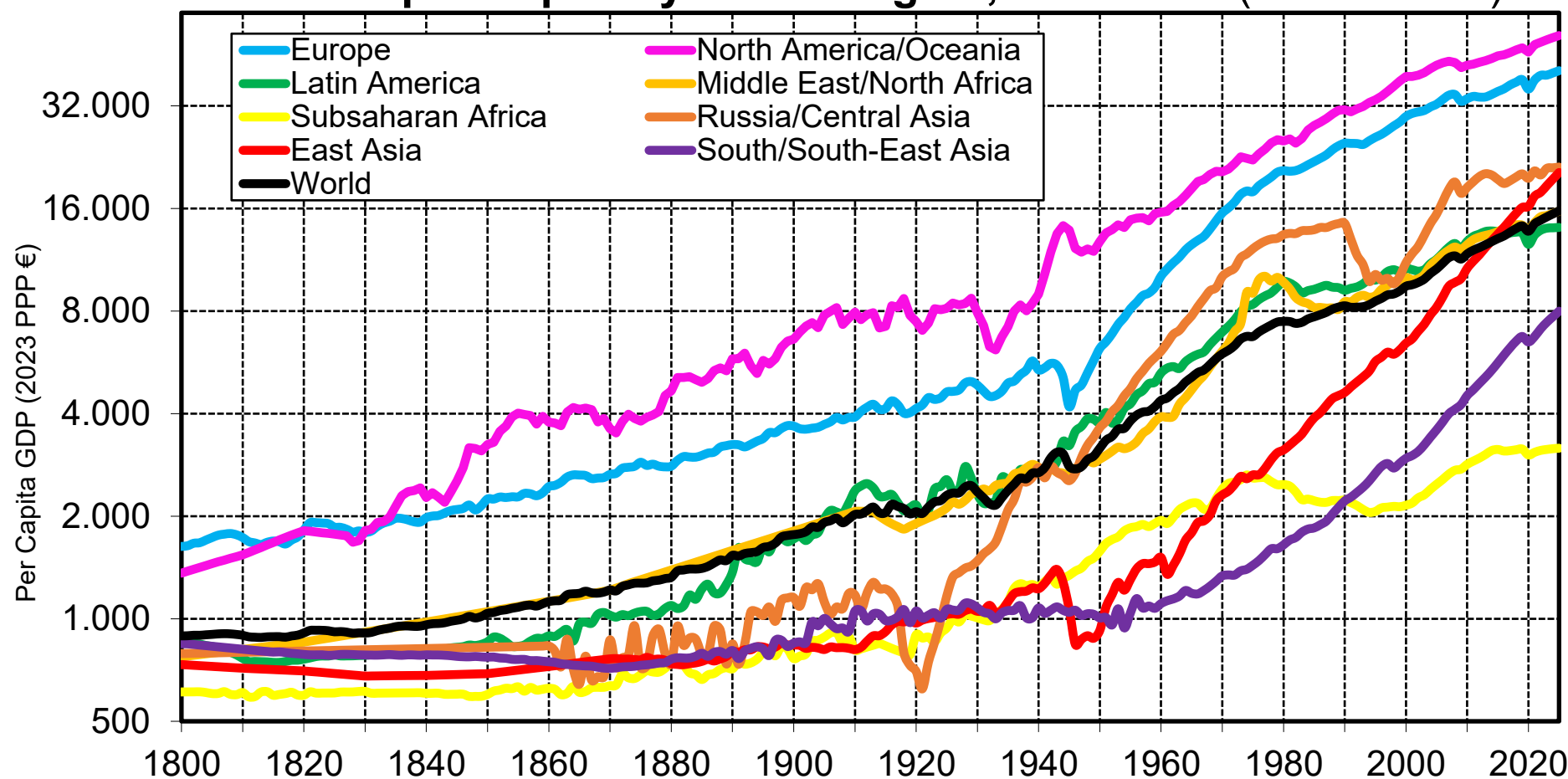
Note: Regional average (median) of all observations in a region from 1950 to today except for "Russia and Central Asia" from 1990 to today. To derive factor shares we keep the last observed labor share within the corporate sector constant within a country, or if never observed we use the regional average labour share within the corporate sector.

Table A6b: Assumptions for historical imputations (1900 & 1930) (South & Sout-East Asia, Subsaharan Africa, Latin America, MENA)

Real GDP in 2023 Euro PPP	Total Economy		Government sector					Corporate sector					Household sector							
	Product ion taxes	CFC	Total	Wages	Gross OS	Net OS	CFC	Total	Wages	Gross OS	Net OS	CFC	Total	Wages	Gross Mixed Income	Net Mixed Income	CFC	Gross OS	Net OS	CFC
0€ to 3000€	7%	5,0%	5%	4%	1%	0%	1%	20%	9%	11%	10%	1,0%	63%	8%	55%	53%	2%	5%	4%	1%
3000€ to 6000€	7%	6,0%	6%	5%	1%	0%	1%	40%	18%	22%	20%	2,0%	42%	7%	35%	33%	2%	5%	4%	1%
6000€ to 10000€	7%	6,5%	7%	6%	1%	0%	1%	50%	23%	28%	25%	2,5%	31%	6%	25%	23%	2%	5%	4%	1%

Note: All values as a share of market price GDP. OS refers to operating surplus. Wages refers to Compensation of Employees including wages and social security contributions. We assume a capital share of 55% of corporate GVA and 50% of net operating surplus in corporate GVA.

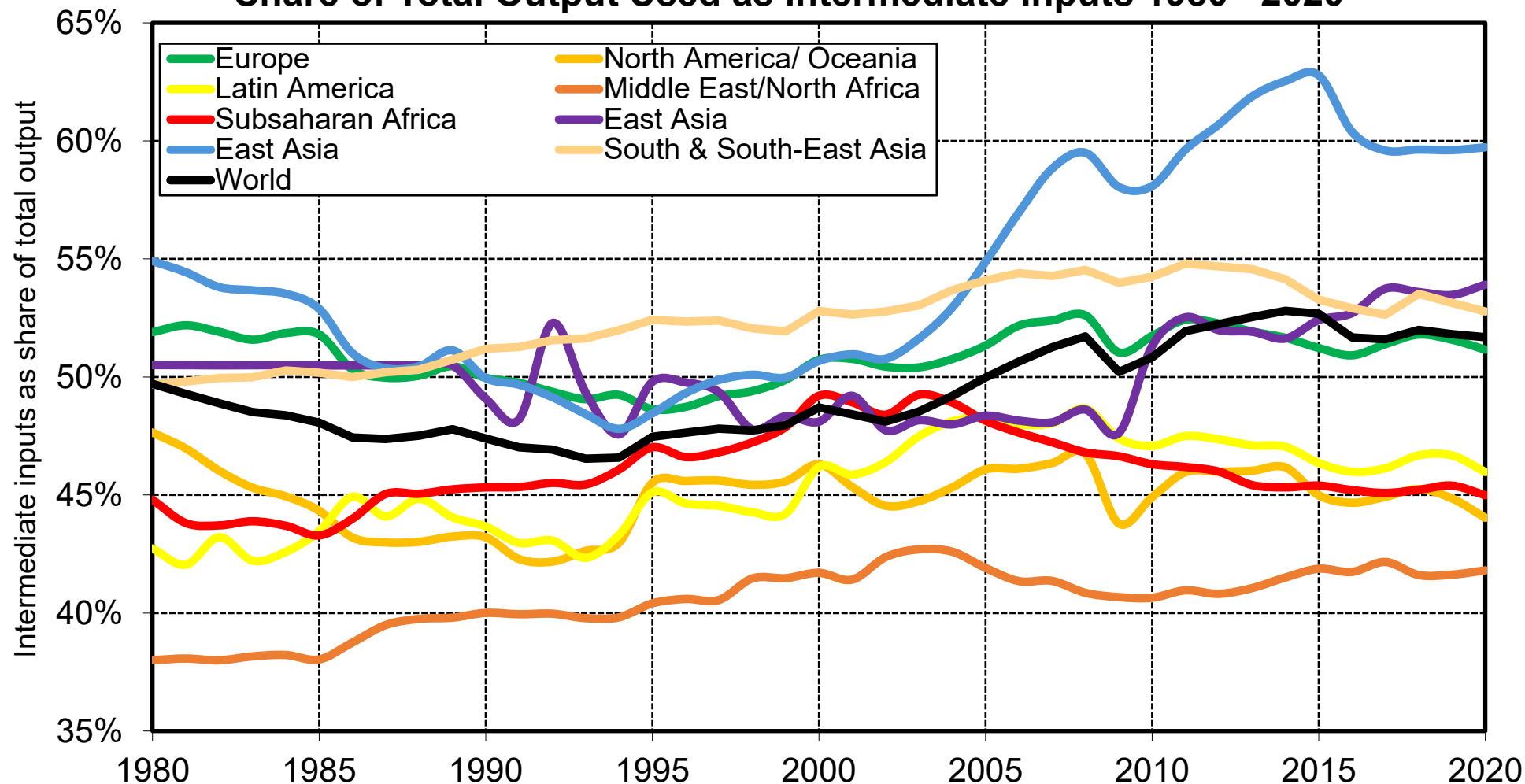
GDP per Capita by World Region, 1800-2025 (2023 PPP €)



Interpretation. Expressed in 2023 PPP €, per capita GDP rose from about 900€ in 1800 to about 16 000€ in 2025, i.e. a multiplication by about 18 and average annual growth rate of 1.3% per year. In 2025, per capita GDP varies from about 3 000€ in Subsaharan Africa to about 40 000-50 000€ in Europe and North America/Oceania.

Sources and series: see wid.world

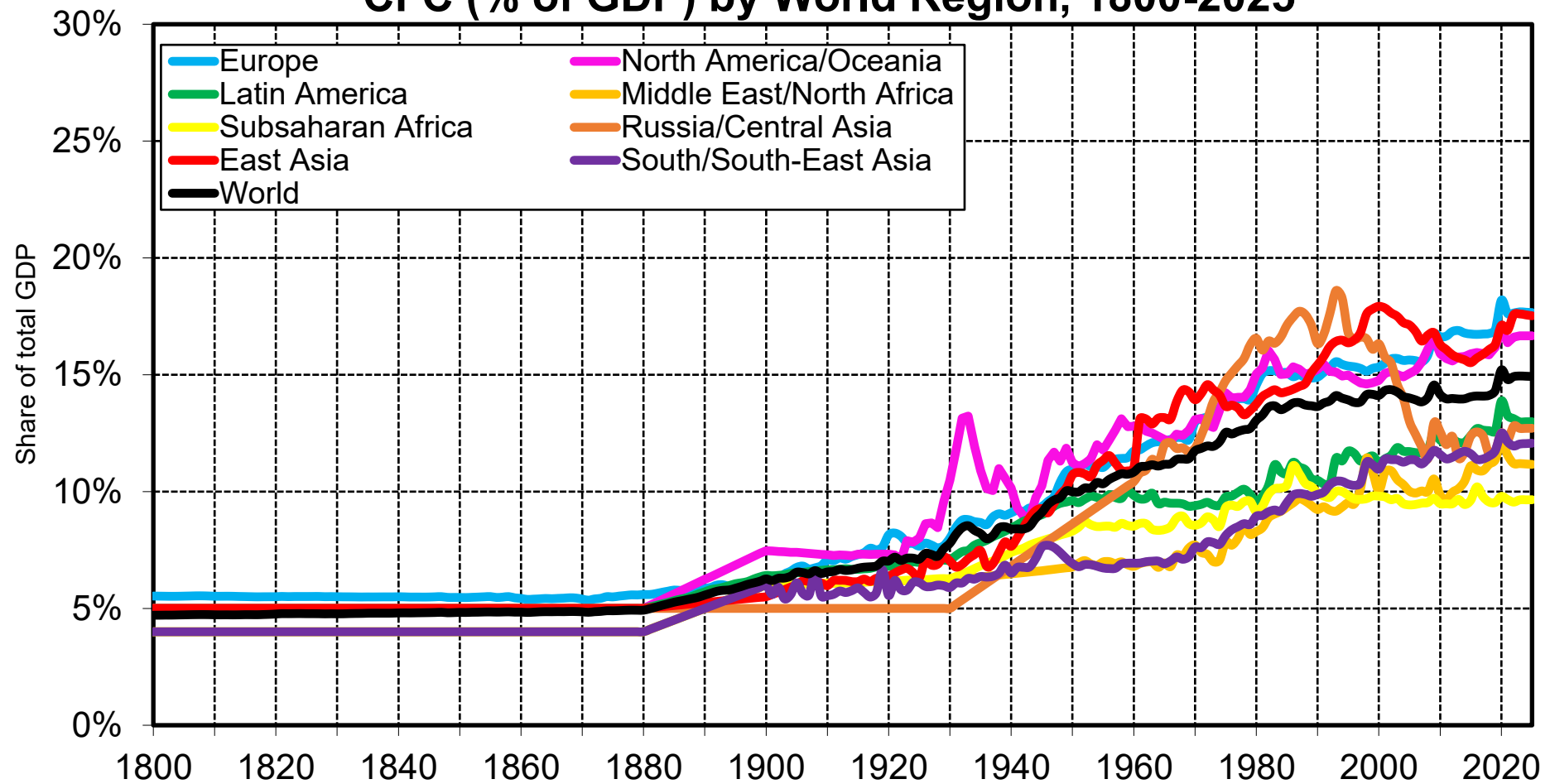
Share of Total Output Used as Intermediate Inputs 1980 - 2020



Interpretation: About half of the worldwide production is used as intermediate inputs. There is substantial heterogeneity between regions, which ranges from close to 40% in MENA up to 60% of output used for intermediate consumption in East Asia. One explanation for the differences between countries is the sectoral decomposition. The increase in intermediate consumption in East Asia (incl. China) goes along with the rise of manufacturing in China which has a relative high share of intermediate consumption. This also drives the global increase since the 1990s.

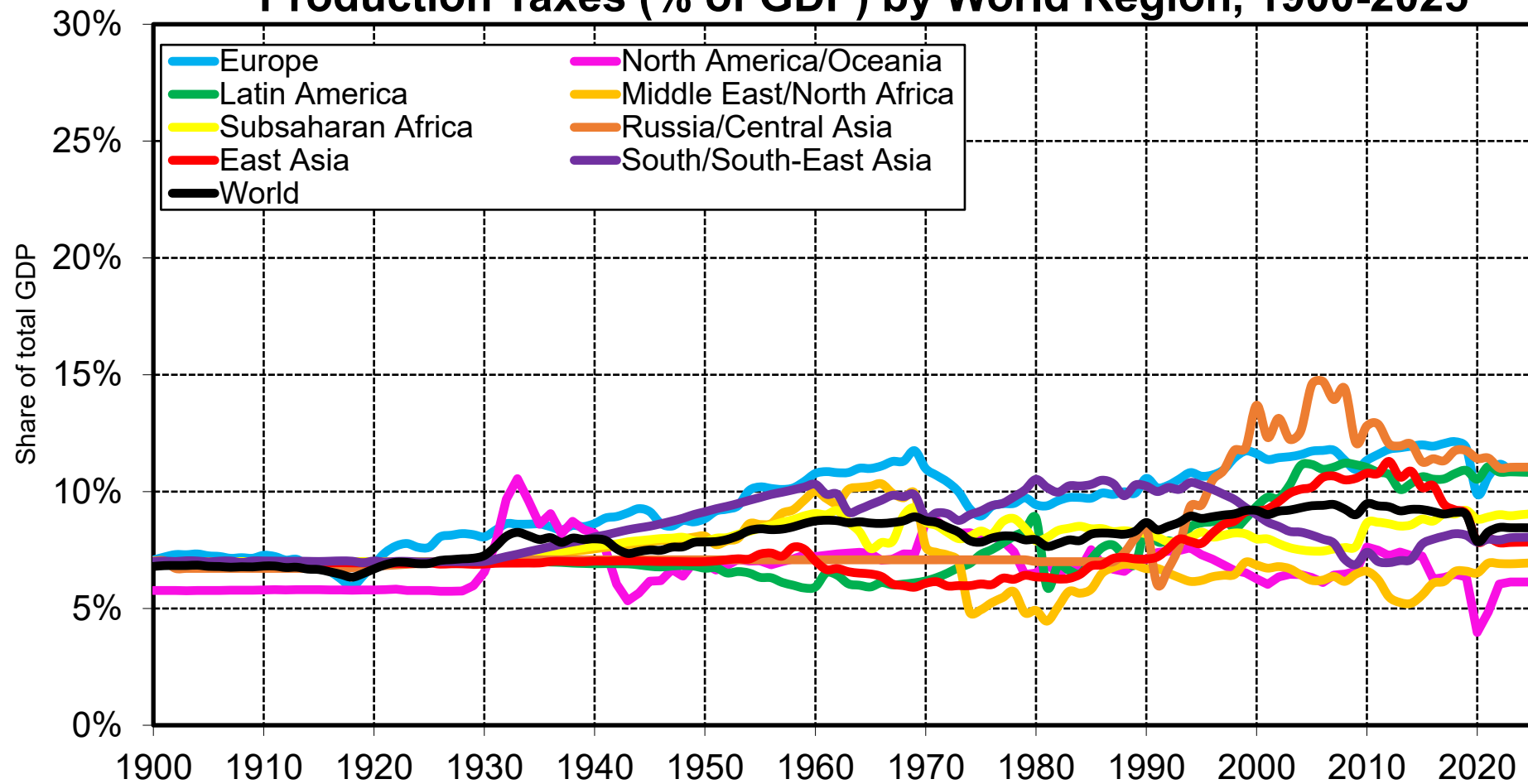
Sources and series: OECD Input-Output Tables; UN SNA Production Account; Groningen World IOT

CFC (% of GDP) by World Region, 1800-2025



Interpretation: We observe a global rise in consumption of fixed capital (CFC) over the past two centuries. Richer Countries have on average a higher CFC rates as share of their GDP. On the world level CFC increased from about 5% in 1800 to 15% today, reflecting the transition from agriculture (with relatively low CFC rates) to manufacturing (higher CFC rates) and the rise of equipment with faster depreciation and capital obsolescence (e.g. computers). **Sources and series:** wid.world

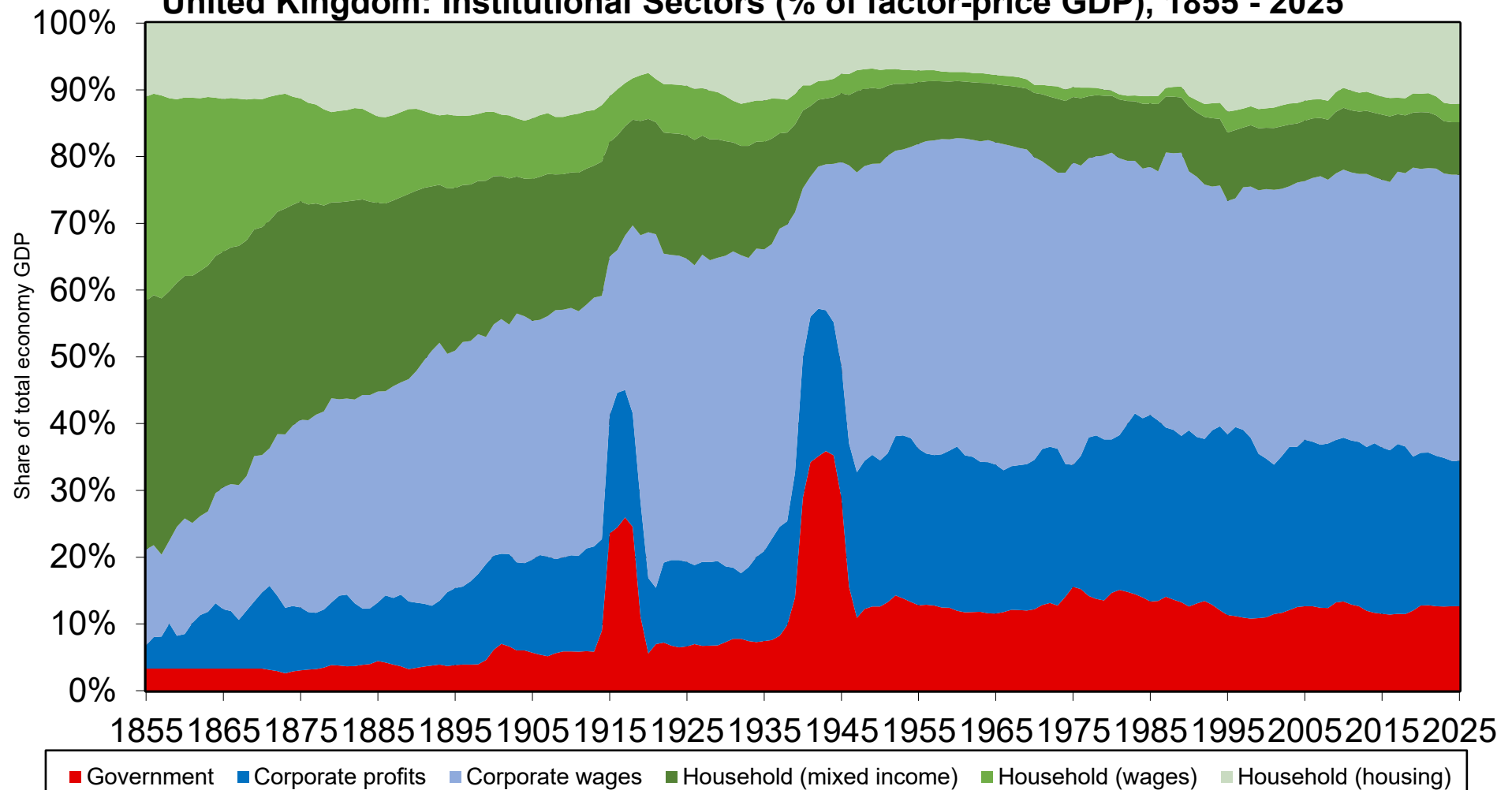
Production Taxes (% of GDP) by World Region, 1900-2025



Interpretation: Taxes on production (net of subsidies) account for about 5% to 12% of GDP. They have increased over time as part of the general rise of government. They are particularly large in Russia/Central Asia in the 1990s-2000s, which seems to reflect a combination of high tax rates and vanishing subsidies (following the fall of USSR).

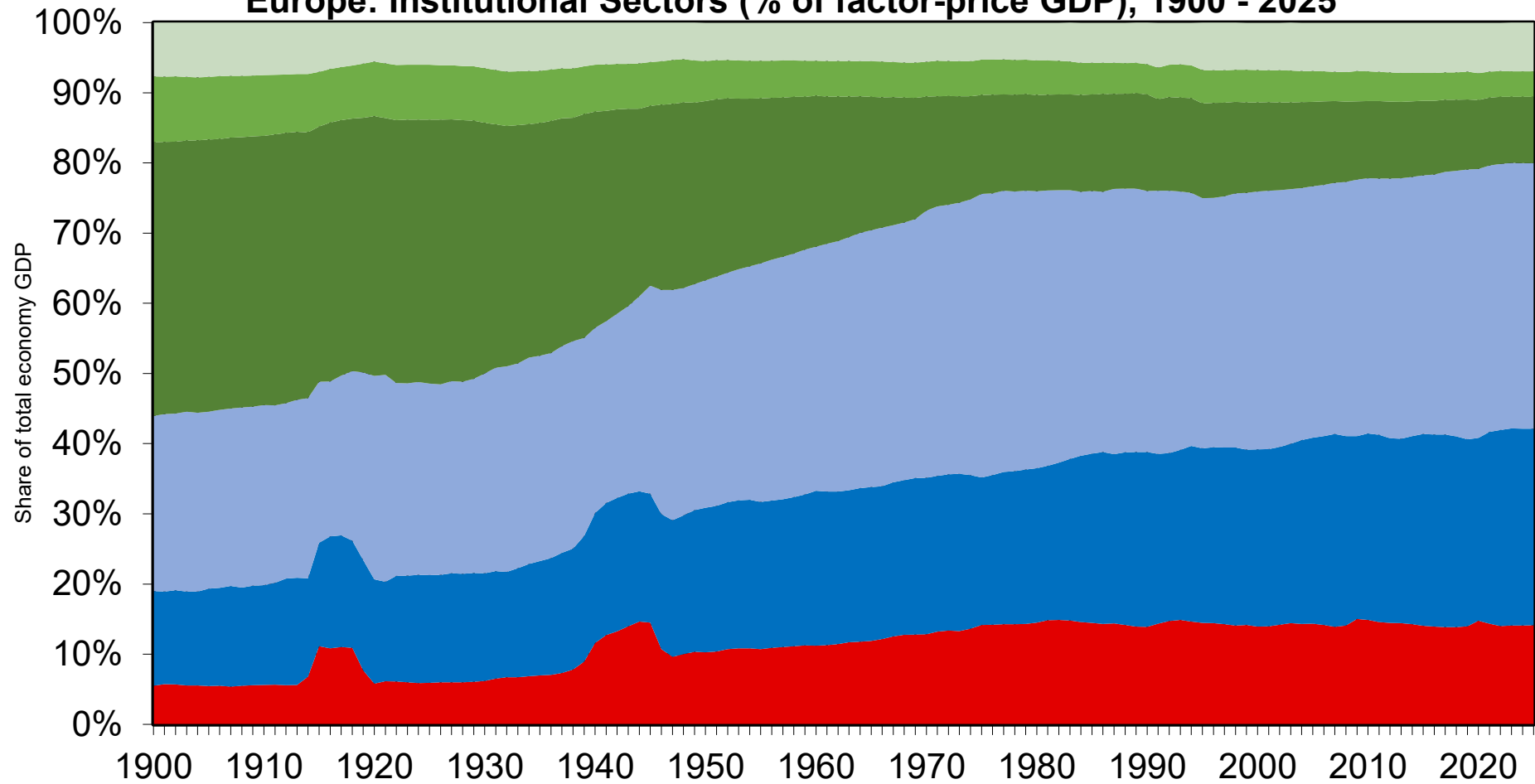
Sources and series: see wid.world

United Kingdom: Institutional Sectors (% of factor-price GDP), 1855 - 2025



Interpretation: Over the past 150 years, the corporation sector has strongly increased in size while the household sector (self-employment and unincorporated businesses) has declined. Government sector rose between the 1910s-1920s and the 1970s-1980s with spikes during the world wars and stabilized since 1980s-1990s. **Sources and series:** UN SNA, Piketty & Zucman (2014)

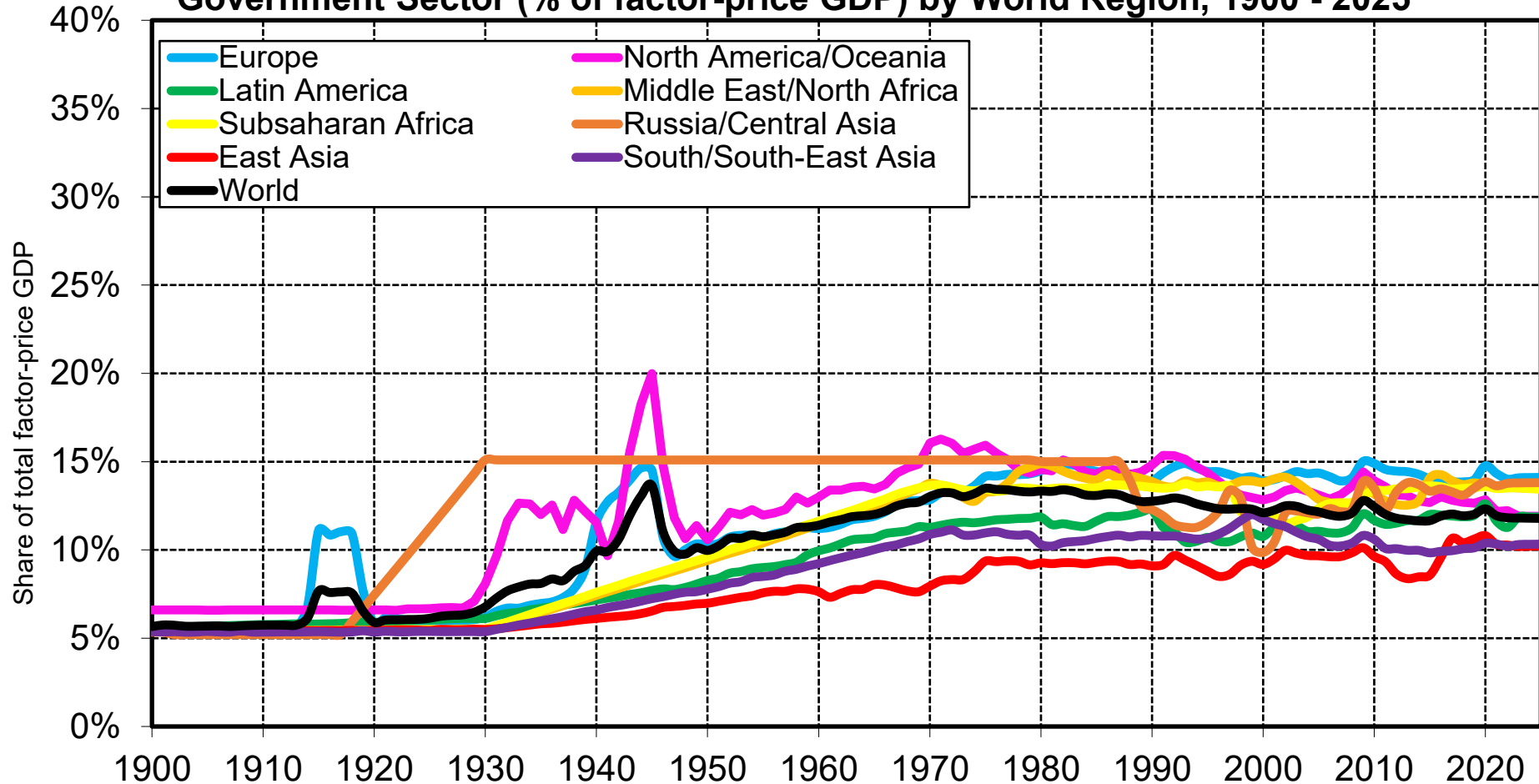
Europe: Institutional Sectors (% of factor-price GDP), 1900 - 2025



■ Government ■ Corporate profits ■ Corporate wages ■ Household (mixed income) ■ Household (wages) ■ Household (housing)

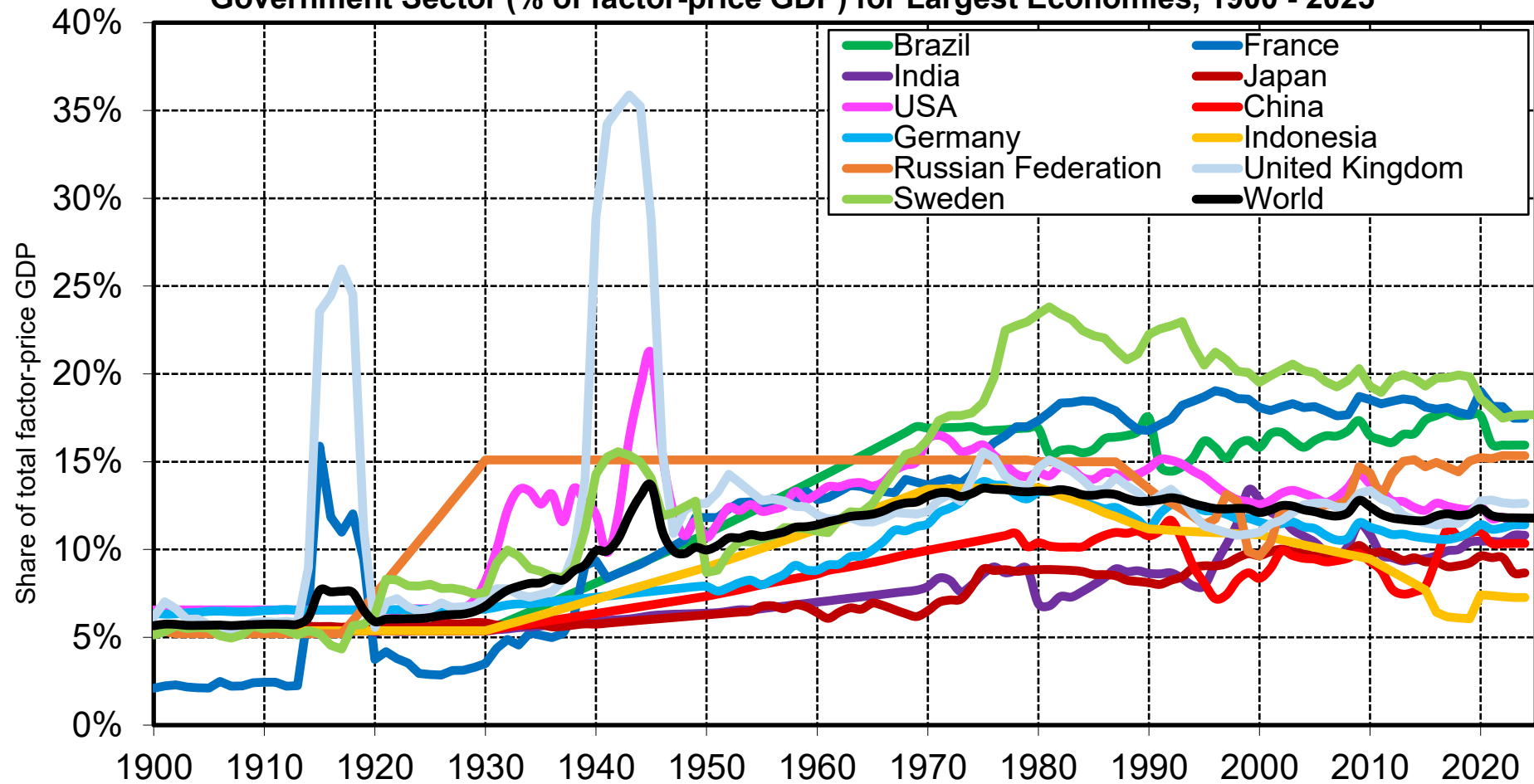
Sources and series: see wid.world

Government Sector (% of factor-price GDP) by World Region, 1900 - 2025



Interpretation: The worldwide share of value added produced by the government sector increased from around 5% of factor-price GDP to about 13% between 1900 and 1970. Since the 1970s the government share is stable. The world was stand out due to large military sector. The government sector is defined as entities under control of the government and which produce non-market goods and services (available for free or sold at a price that is not economically significant). State-owned companies selling goods and services at economically significant prices are included in the corporate sector. **Sources and series:** see wid.world

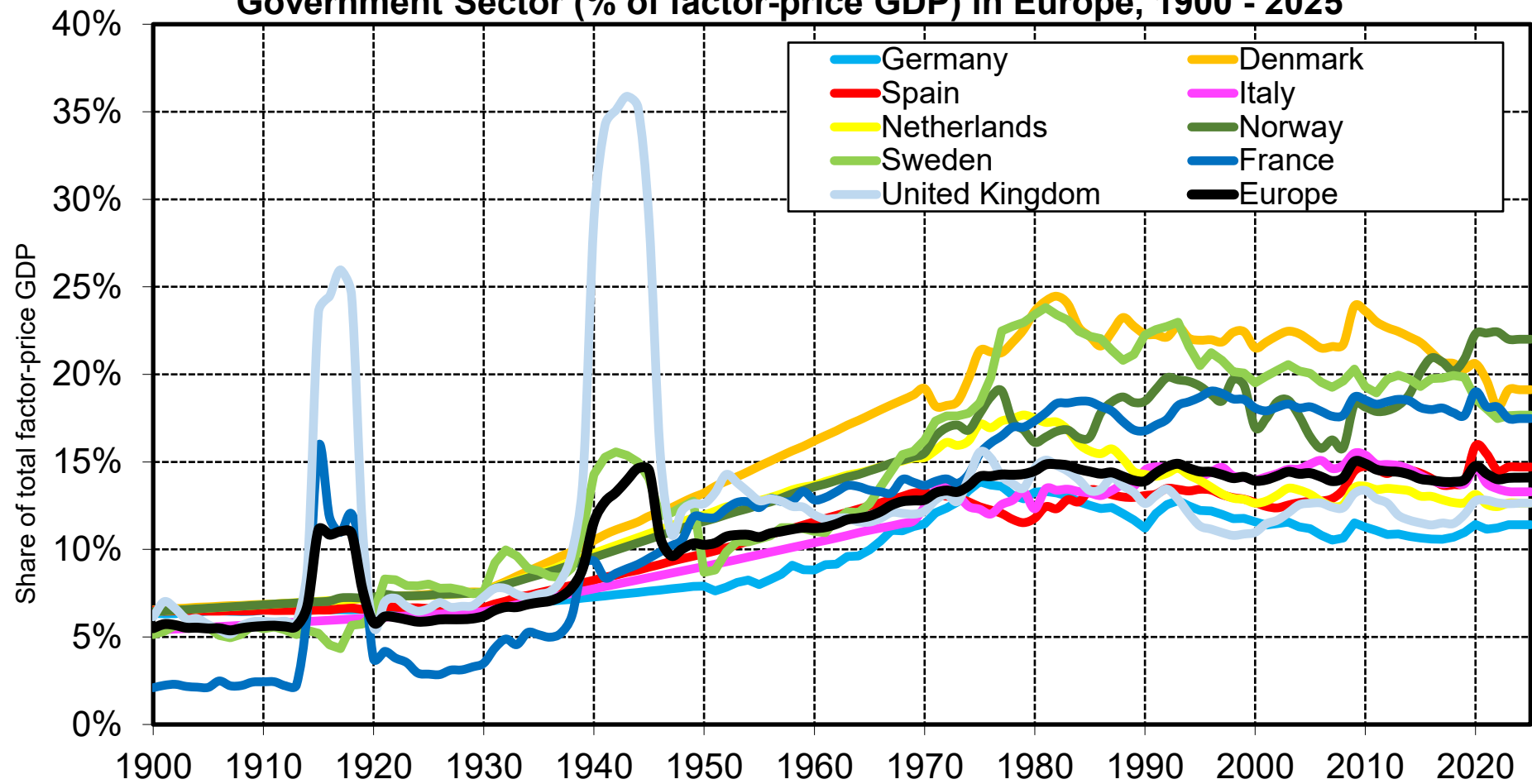
Government Sector (% of factor-price GDP) for Largest Economies, 1900 - 2025



Interpretation: There are large variation in the size of the government sector between countries. In some European countries like Sweden or France the Value added of the government sector accounts for up to 20% of GDP at factor prices. In other countries like Japan and China the government sector accounts today for about 10% of GDP.

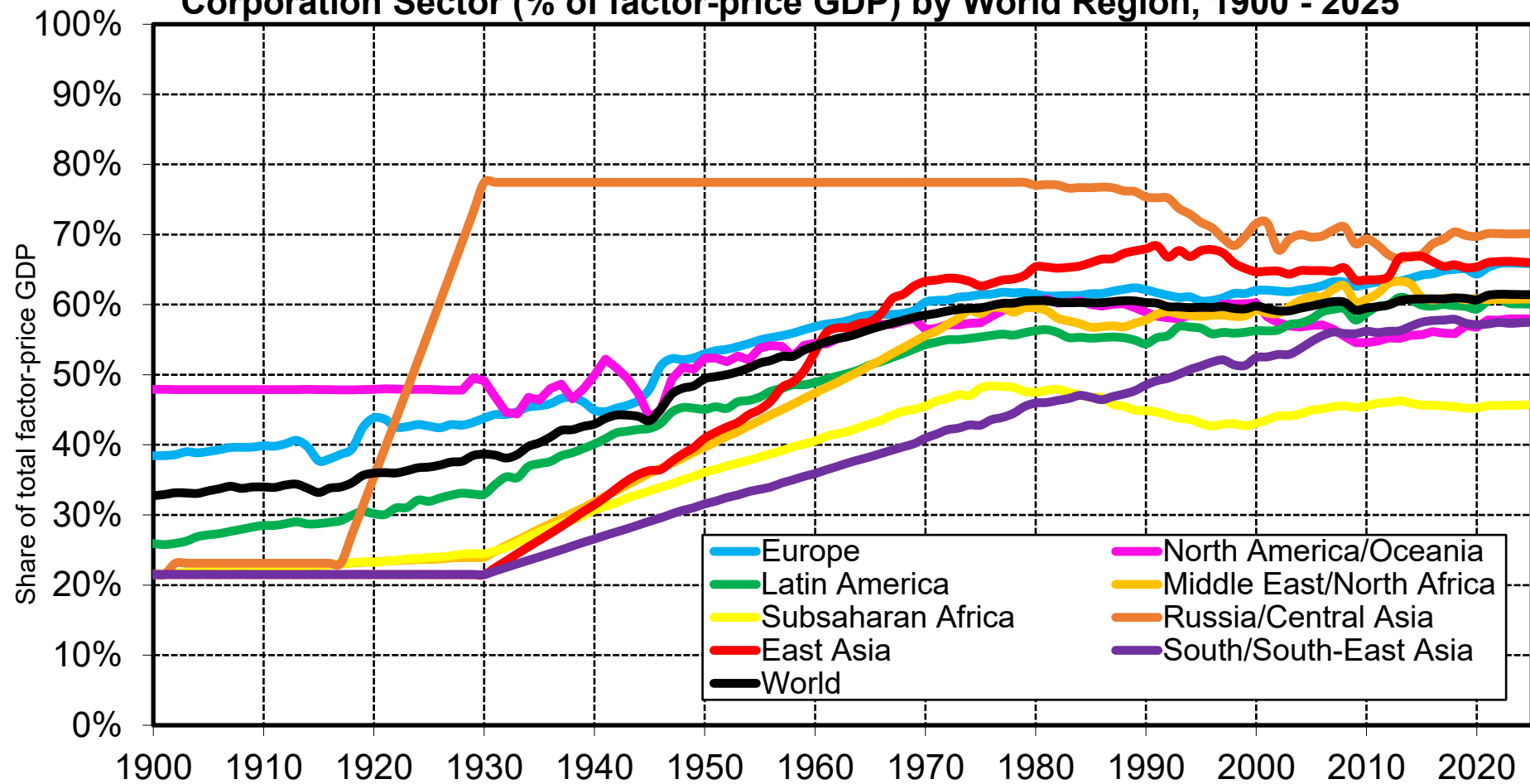
Sources and series: see wid.world

Government Sector (% of factor-price GDP) in Europe, 1900 - 2025



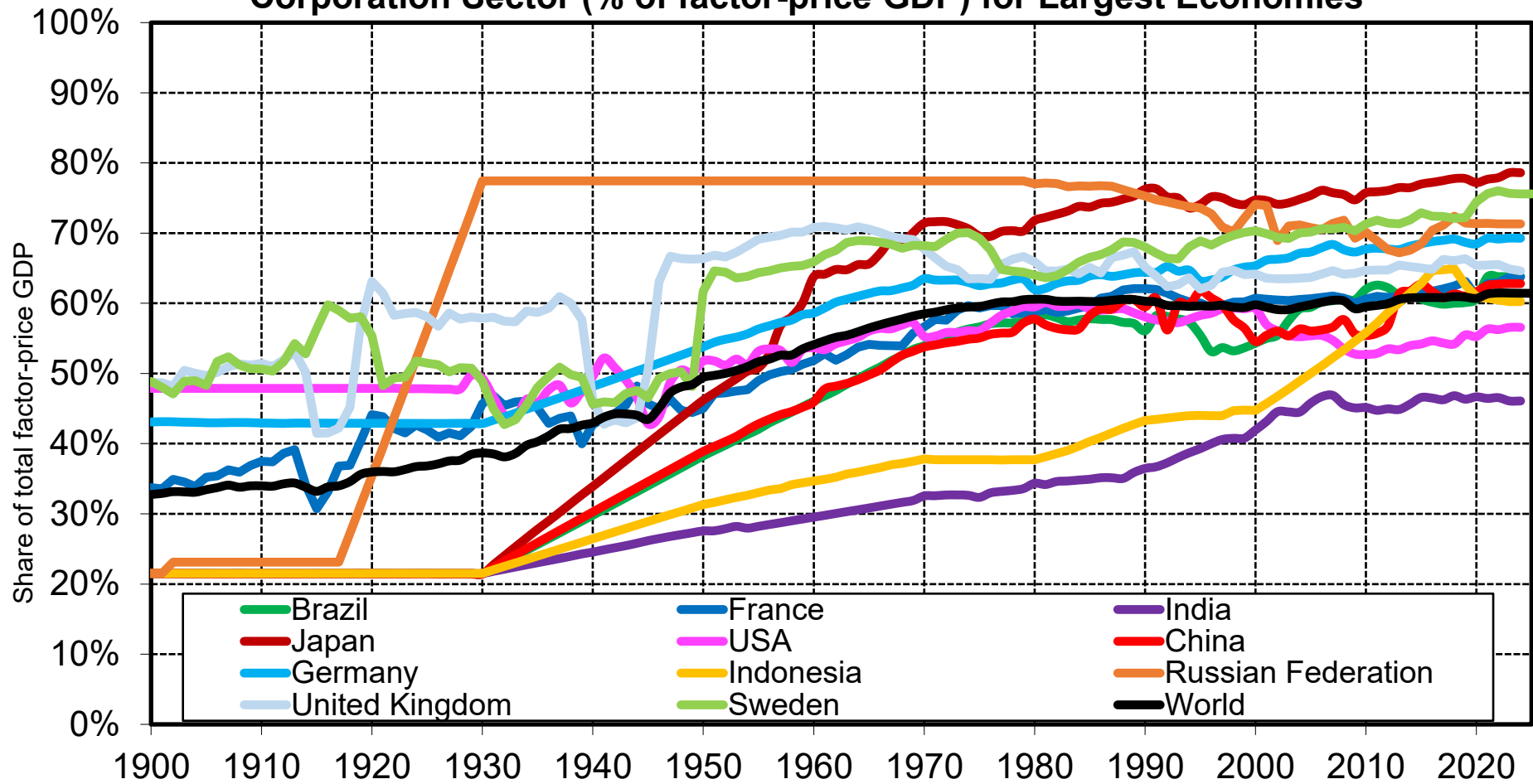
Sources and series: see wid.world

Corporation Sector (% of factor-price GDP) by World Region, 1900 - 2025



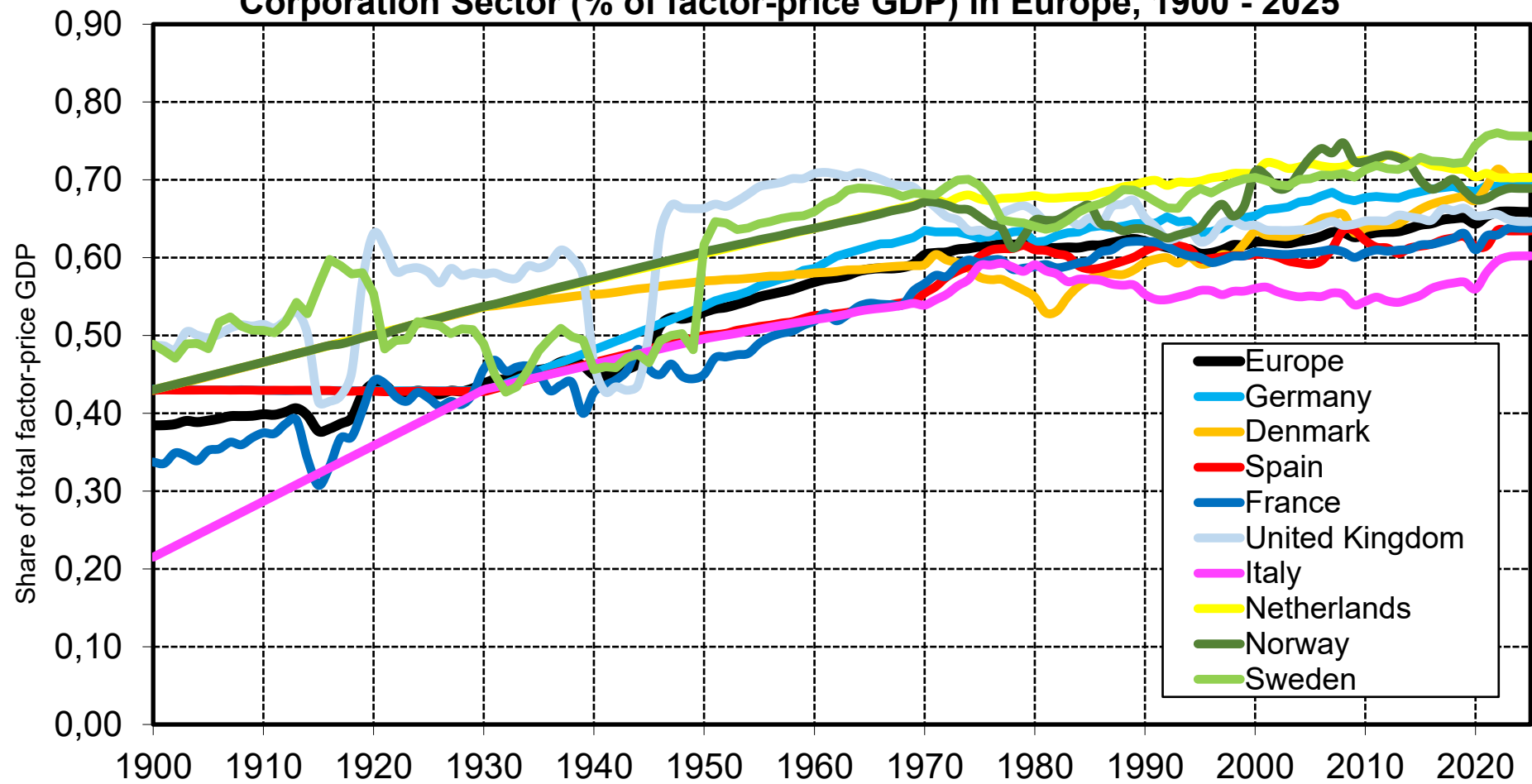
Interpretation: The size the corporate sector increases with economic development and tends to gradually replace the household sector (self-employment). Today the corporate sector in Subsaharan Africa is substantial lower than in other regions of the world. During the Soviet era the corporate sector was very large because there was very little or no self employment. The corporate sector includes non-financial and financial enterprises. **Sources and series:** see wid.world

Corporation Sector (% of factor-price GDP) for Largest Economies



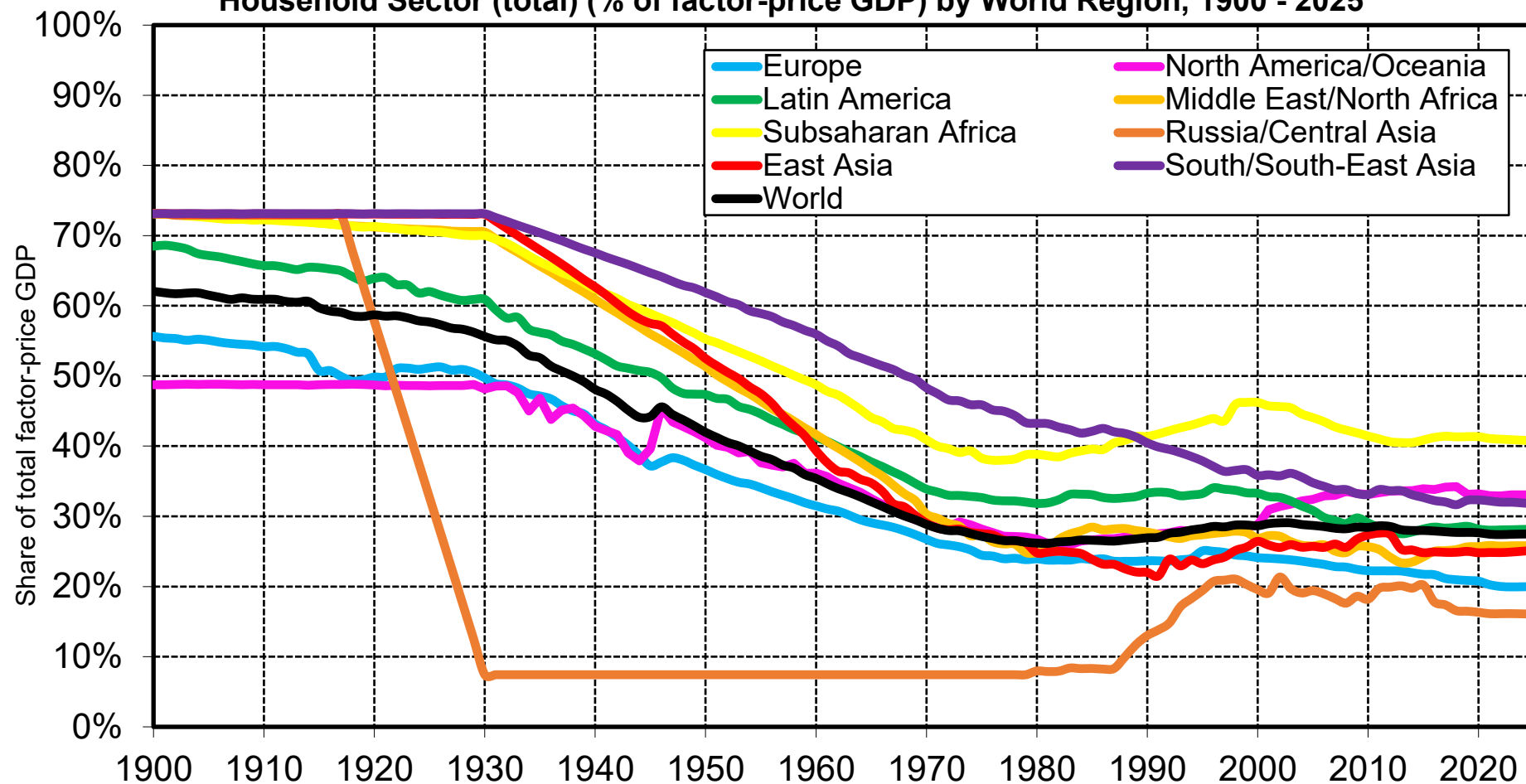
Sources and series: see wid.world

Corporation Sector (% of factor-price GDP) in Europe, 1900 - 2025



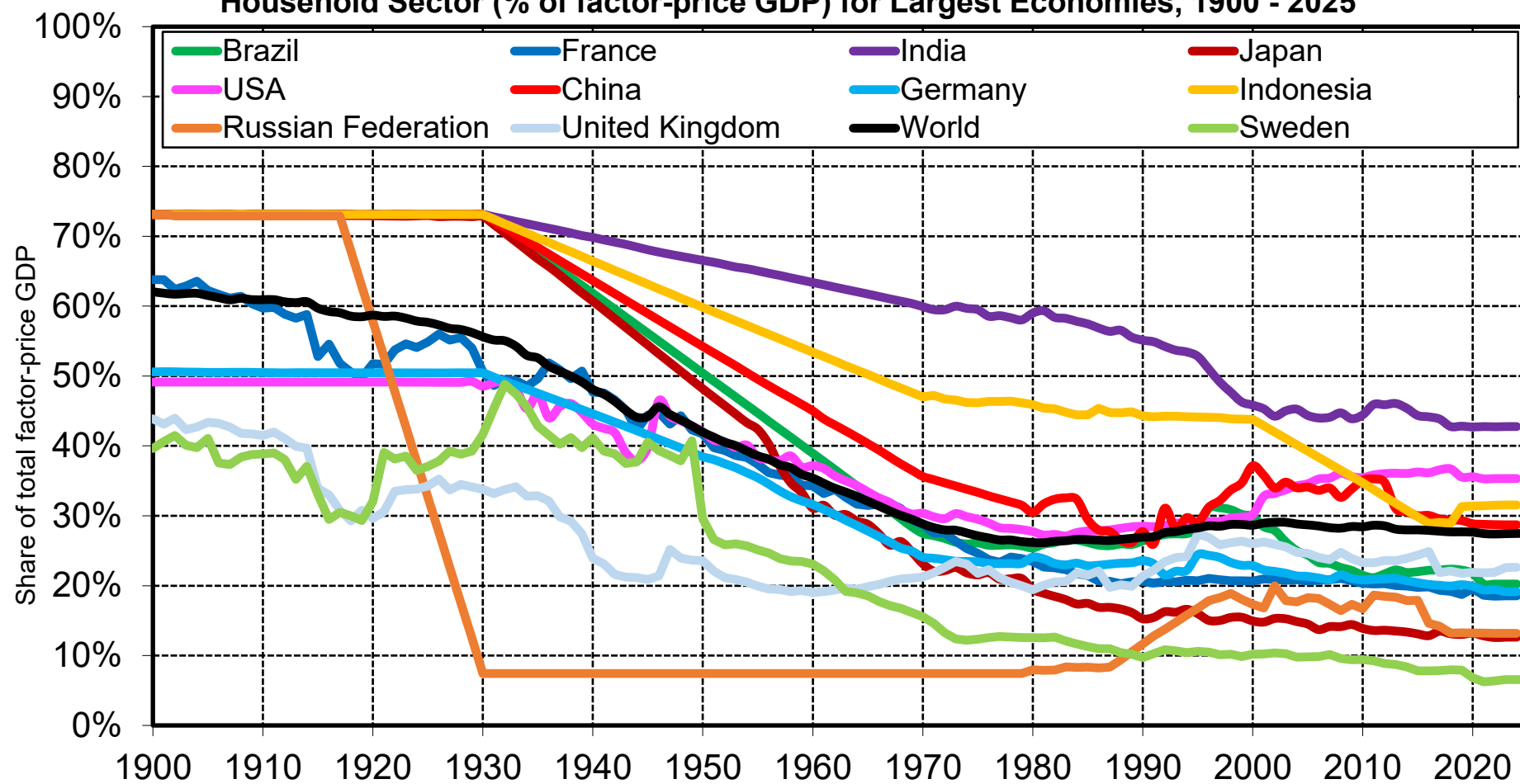
Sources and series: see wid.world

Household Sector (total) (% of factor-price GDP) by World Region, 1900 - 2025



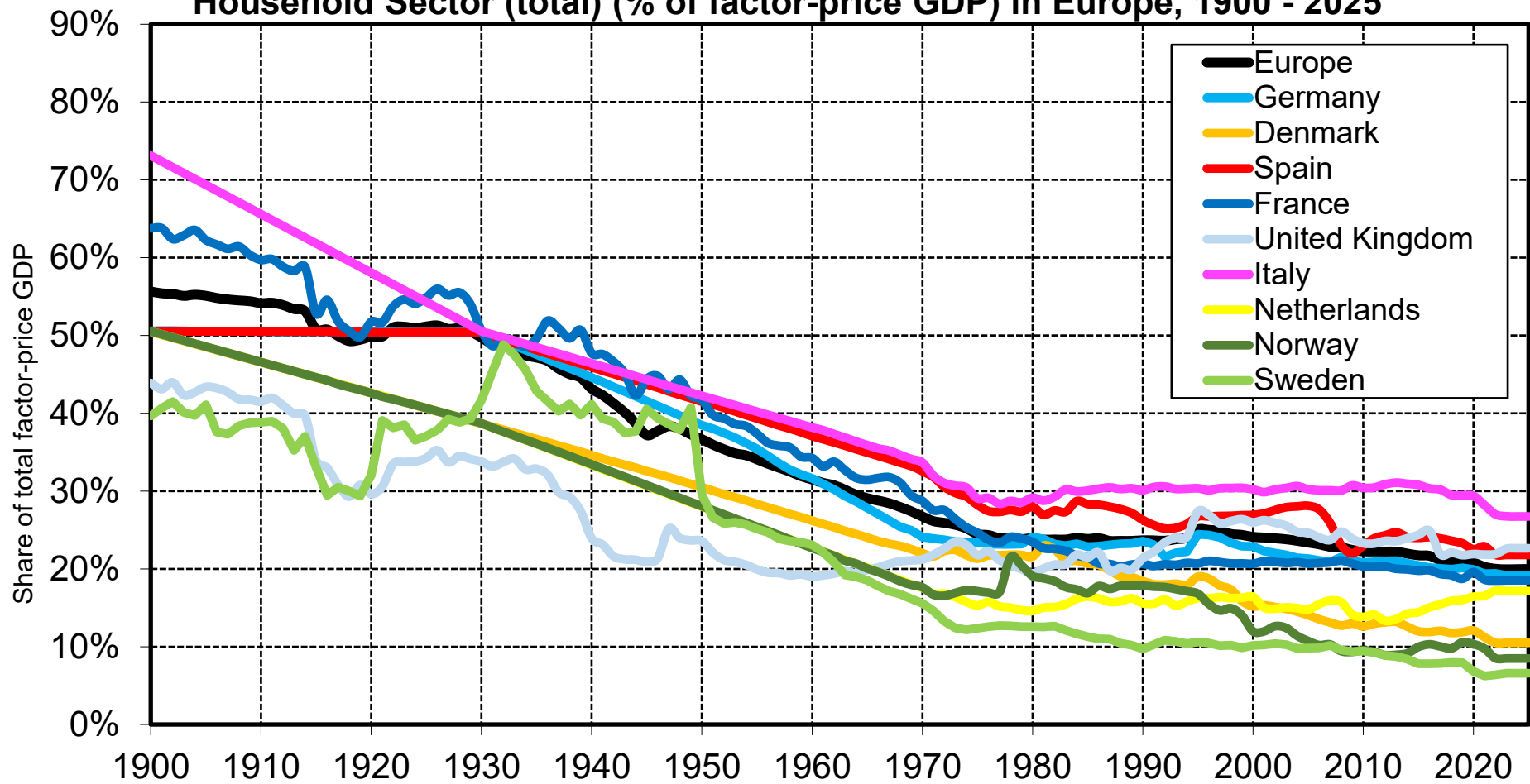
Interpretation: We observe a long-term decline of the household sector, which is gradually replaced by salaried employment in the corporate sector. Today, as a share of GDP, the household sector is largest in Subsaharan Africa and smallest in Europe and Russia/Central Asia. The household sector includes mixed-income from self-employment, wages paid by households and NPISH, and the operating surplus of the household sector, which includes (imputed) rents. **Sources and series:** see wid.world

Household Sector (% of factor-price GDP) for Largest Economies, 1900 - 2025



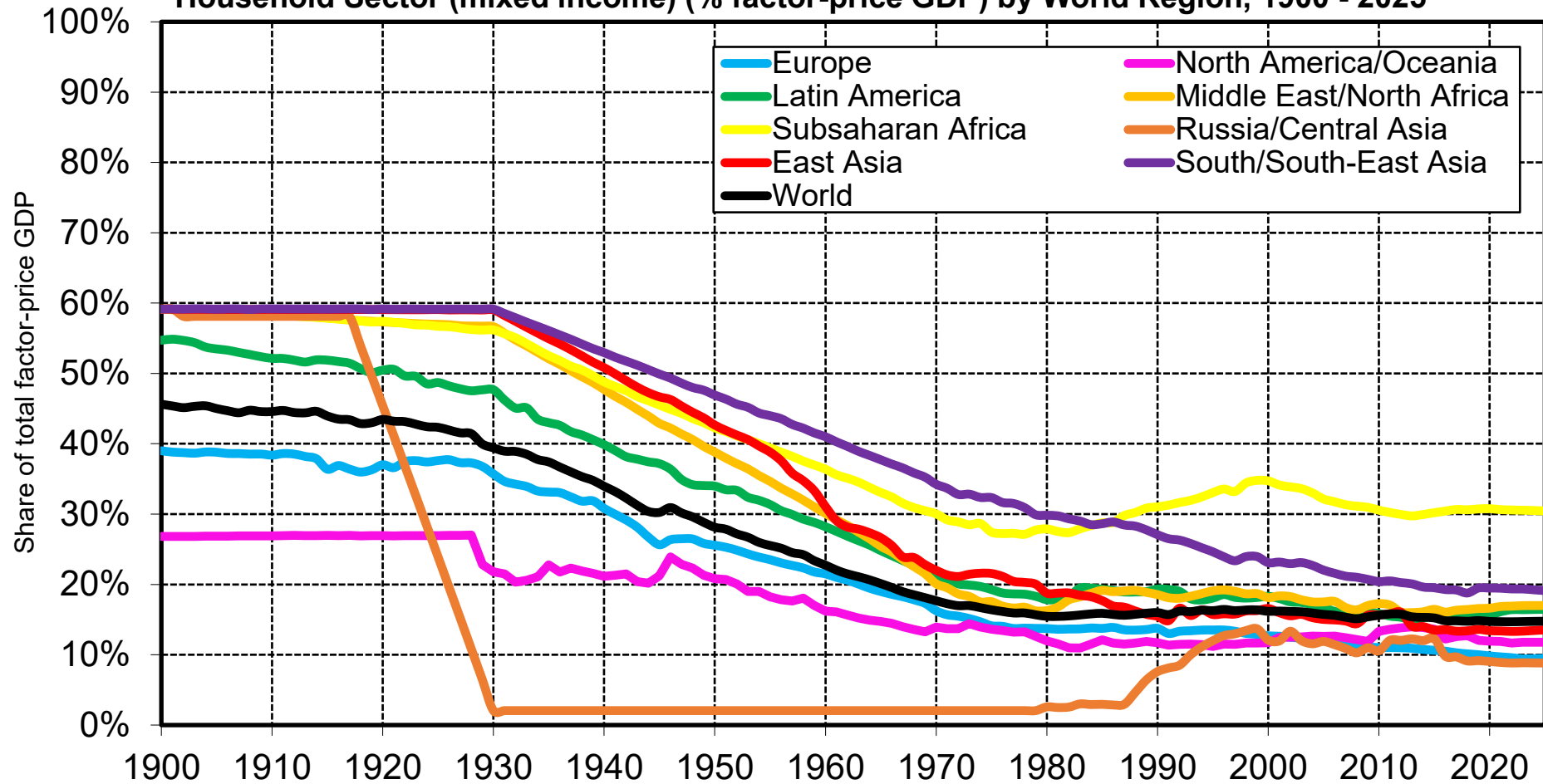
Sources and series: see wid.world

Household Sector (total) (% of factor-price GDP) in Europe, 1900 - 2025



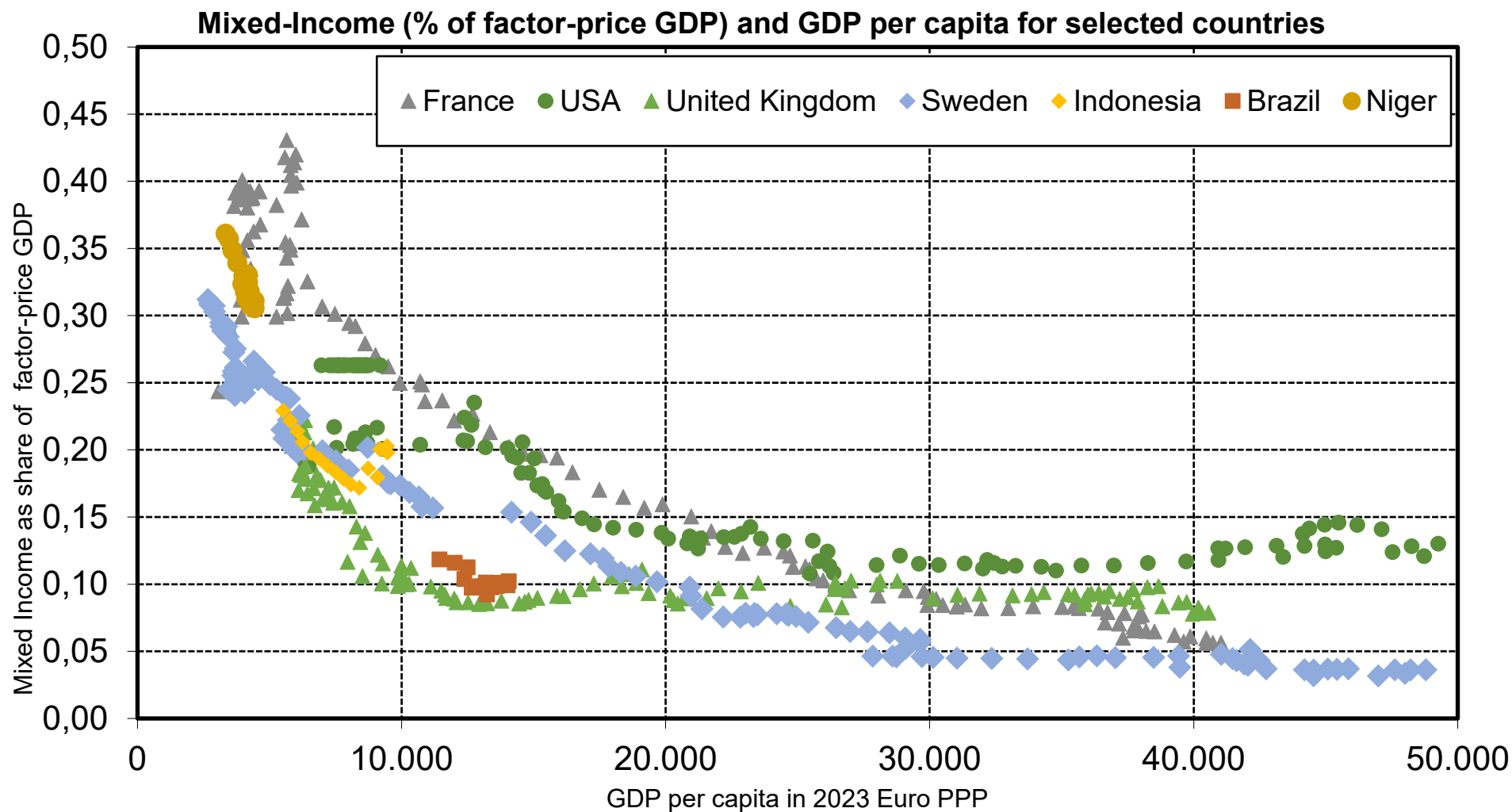
Sources and series: see wid.world

Household Sector (mixed income) (% factor-price GDP) by World Region, 1900 - 2025



Interpretation: We observe a strong long-term decline of mixed income (self employment). Today, as a share of GDP, mixed income is largest in Subsaharan Africa and smallest in Europe and Russia/Central Asia.

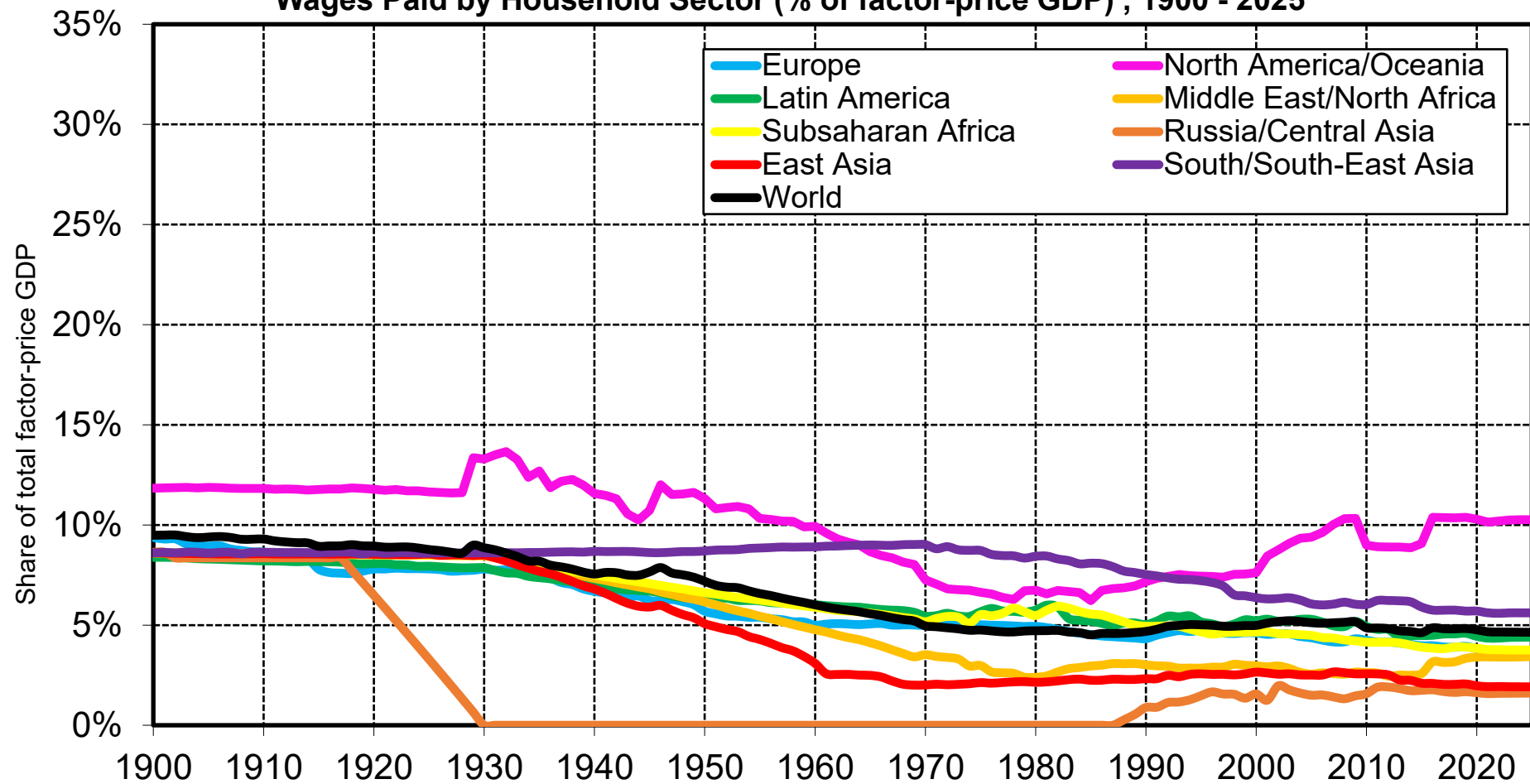
Sources and series: see wid.world



Interpretation: Mixed income as a share of GDP declines with higher GDP per capita levels. This relation is stronger in early stages of development. France, US, Sweden, and UK from 1900 to today. Indonesia, Brazil and Niger from 2000 to 2020.

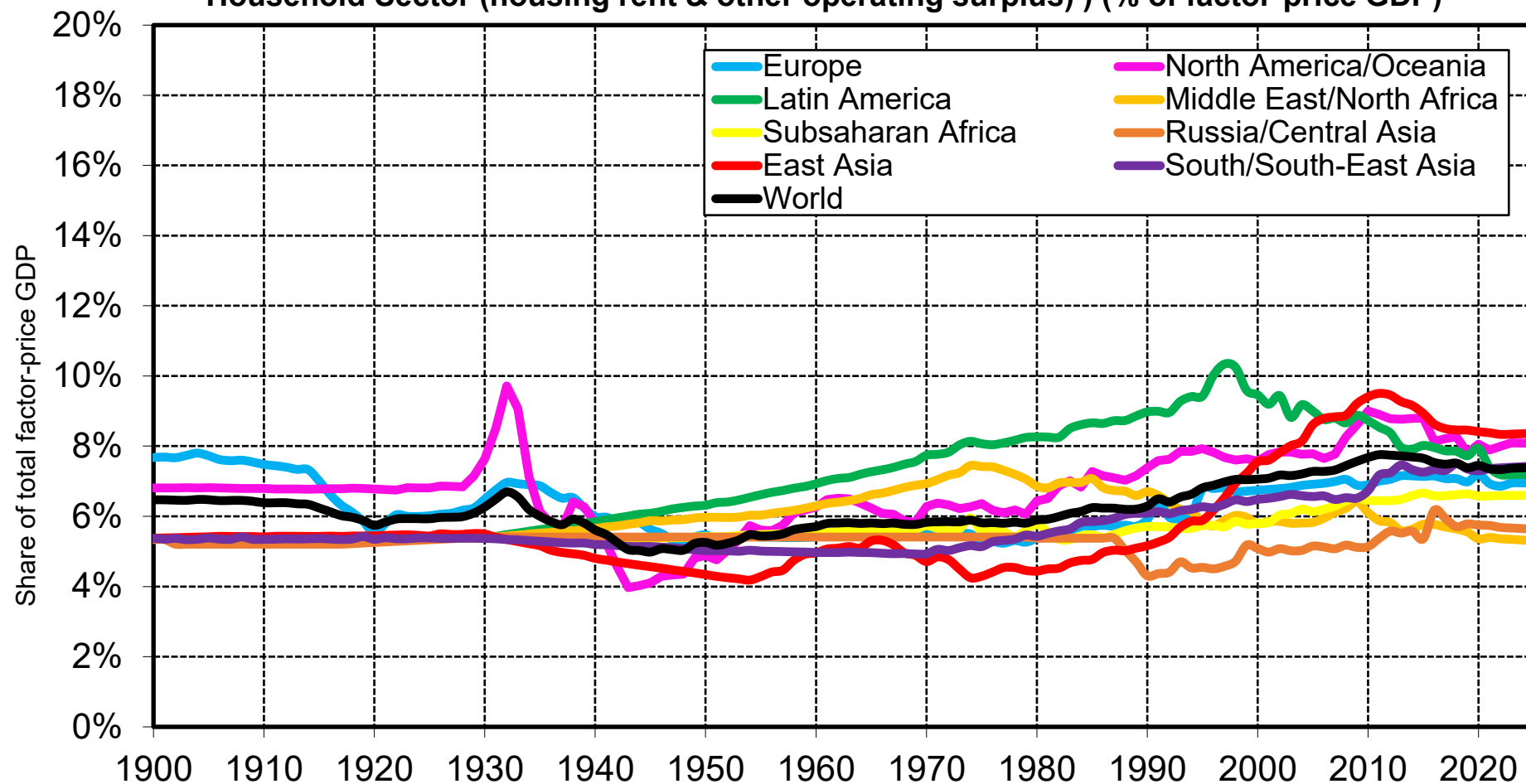
Sources and series: see wid.world

Wages Paid by Household Sector (% of factor-price GDP) , 1900 - 2025



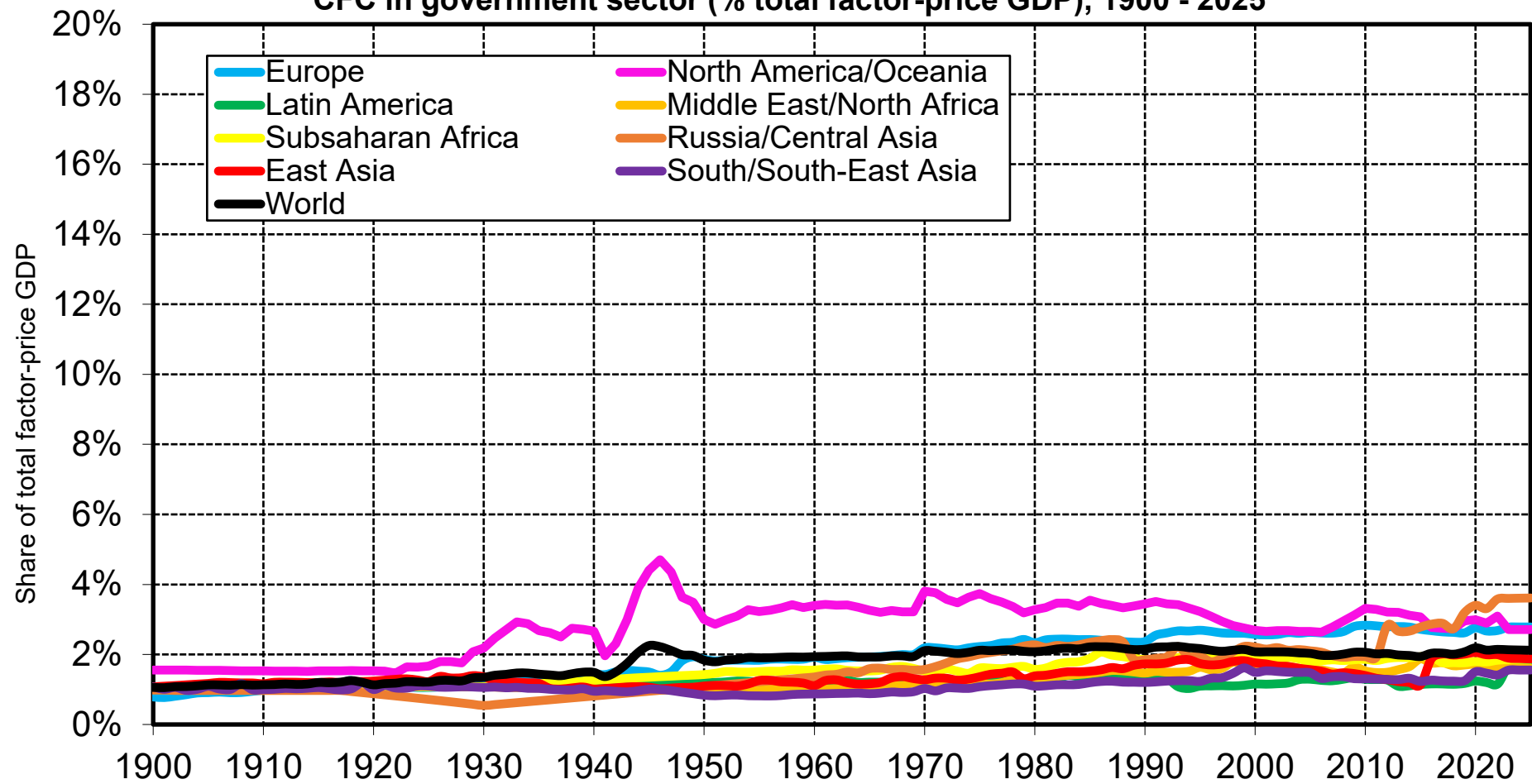
Interpretation: We observe a long-term decline of wages paid by the household sector (domestic labour, unincorporated businesses and NPISH) from about 15% of GDP in 1900 to less than 5% of GDP in 2020. Wages paid by households virtually disappear under USSR. In the recent period high levels in the use are partially driven by much larger wages paid by NPISH (5% in the US, 1% in most other countries). **Sources and series:** see wid.world

Household Sector (housing rent & other operating surplus)) (% of factor-price GDP)



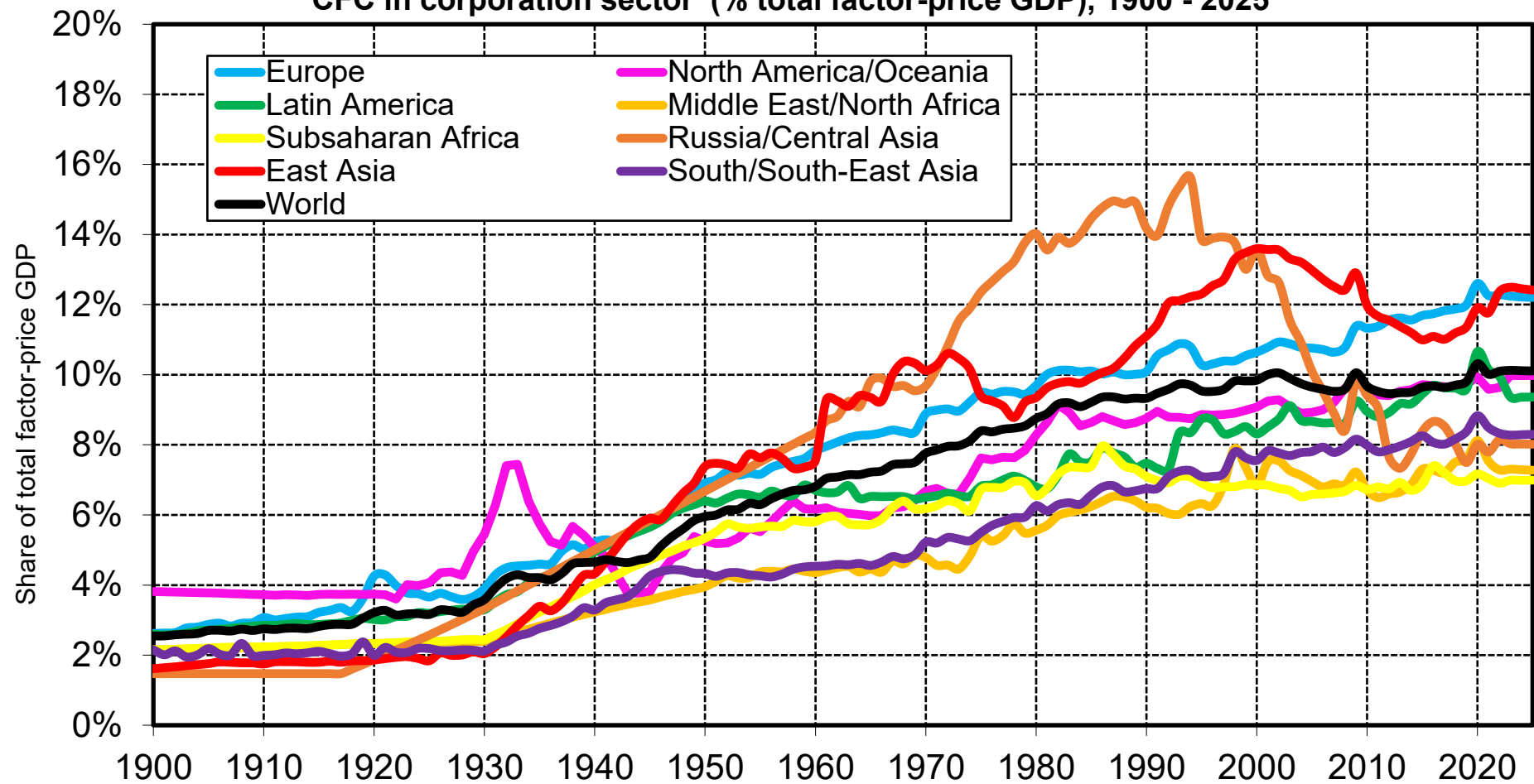
Interpretation: The value of housing rents ranges between 4% and 8% of GDP. In most regions we see a decline between 1910 and the 1950s-1960s (due in part to the rise of rent control) and an increase from 1970s to 2000-2025 (end of rent control and/or structural agglomeration effects). The operating surplus of the household sector includes the value of housing services produced by renting to others or by living in one's own accommodation ("owner-occupiers"). **Sources and series:** see wid.world

CFC in government sector (% total factor-price GDP), 1900 - 2025



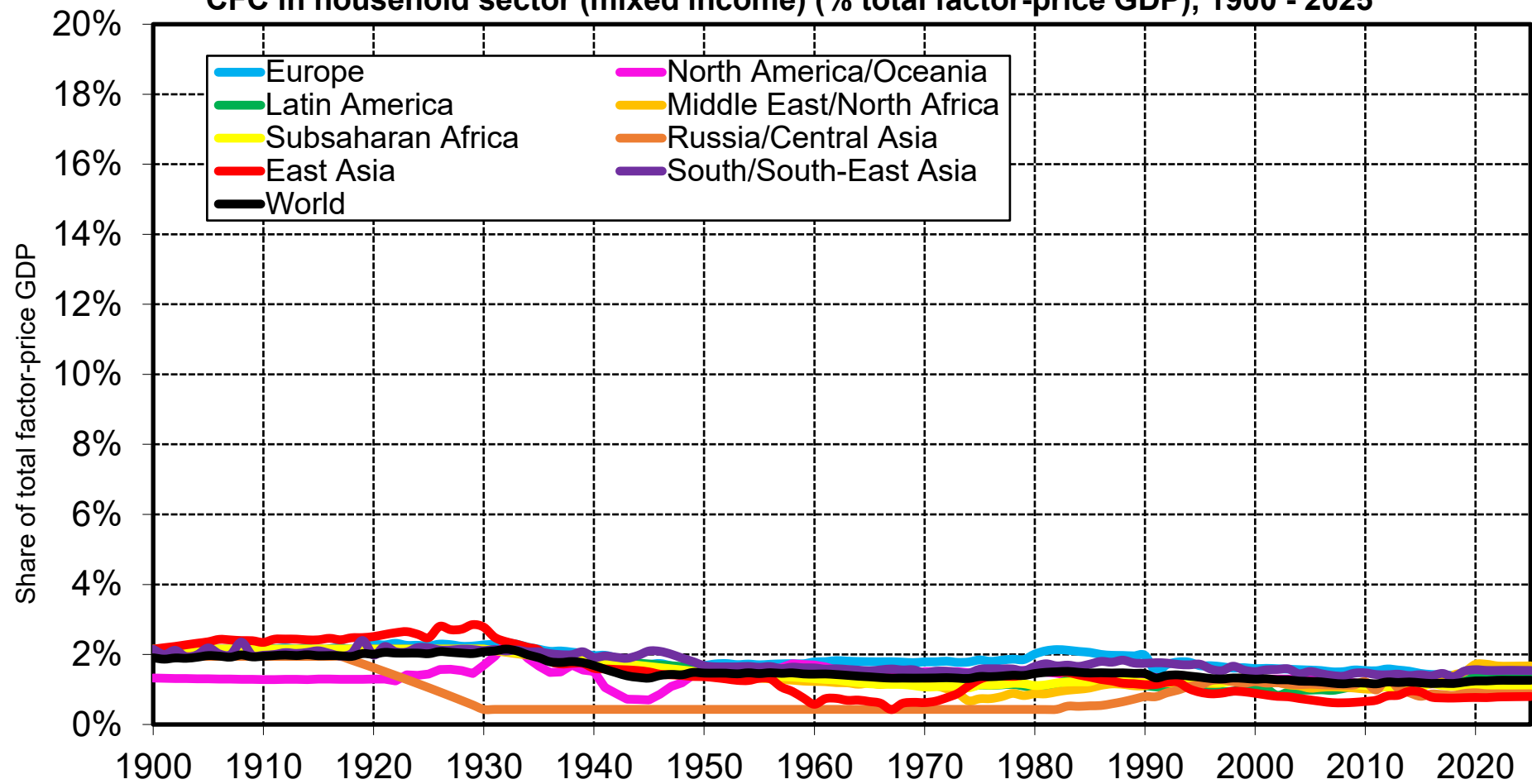
Sources and series: see wid.world

CFC in corporation sector (% total factor-price GDP), 1900 - 2025



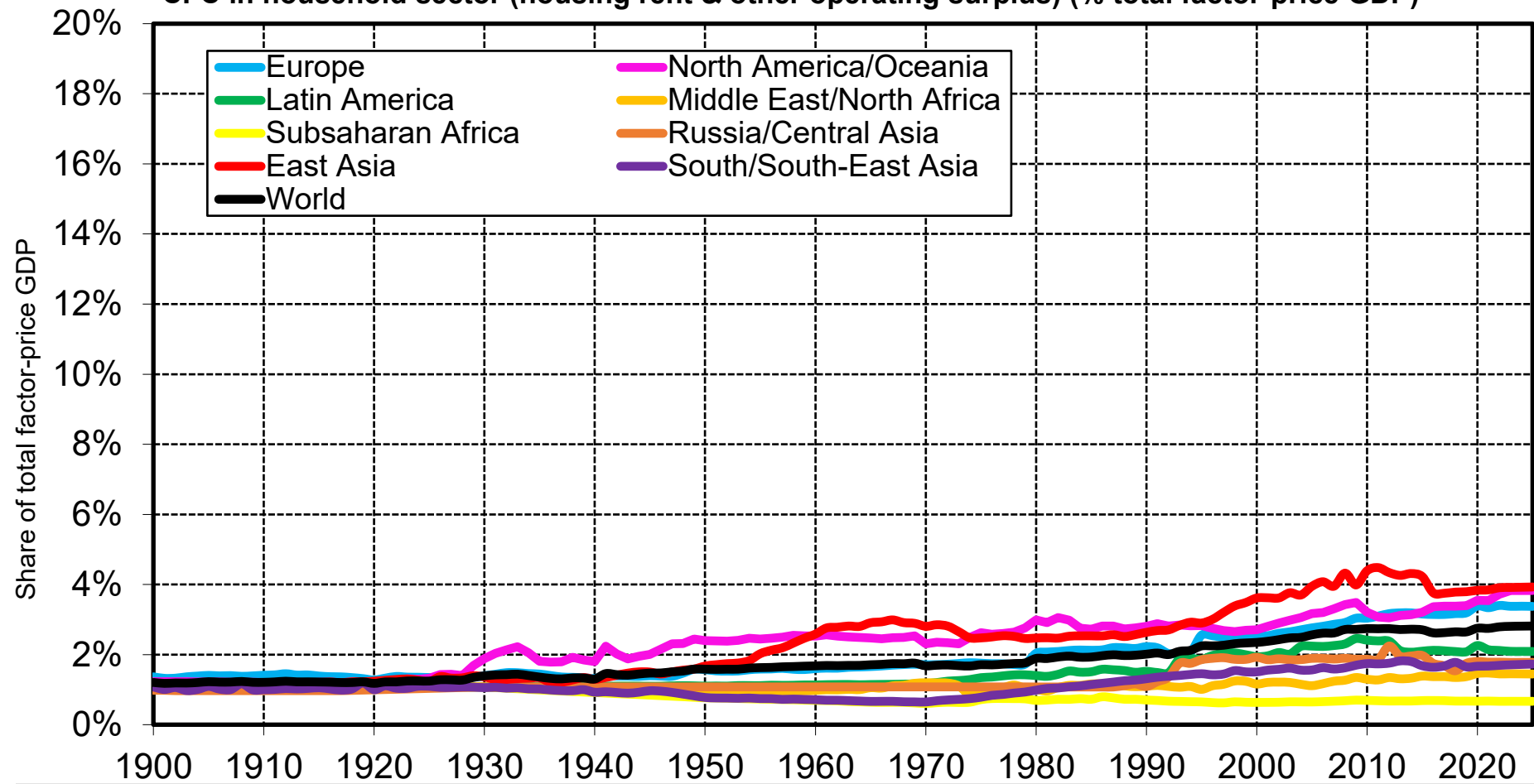
Interpretation. The large historical rise of corporate CFC reflects both the rise of the corporate sector and the increased obsolescence of capital equipment (e.g. rise of computer over structures, etc.). **Sources and series:** see wid.world

CFC in household sector (mixed income) (% total factor-price GDP), 1900 - 2025

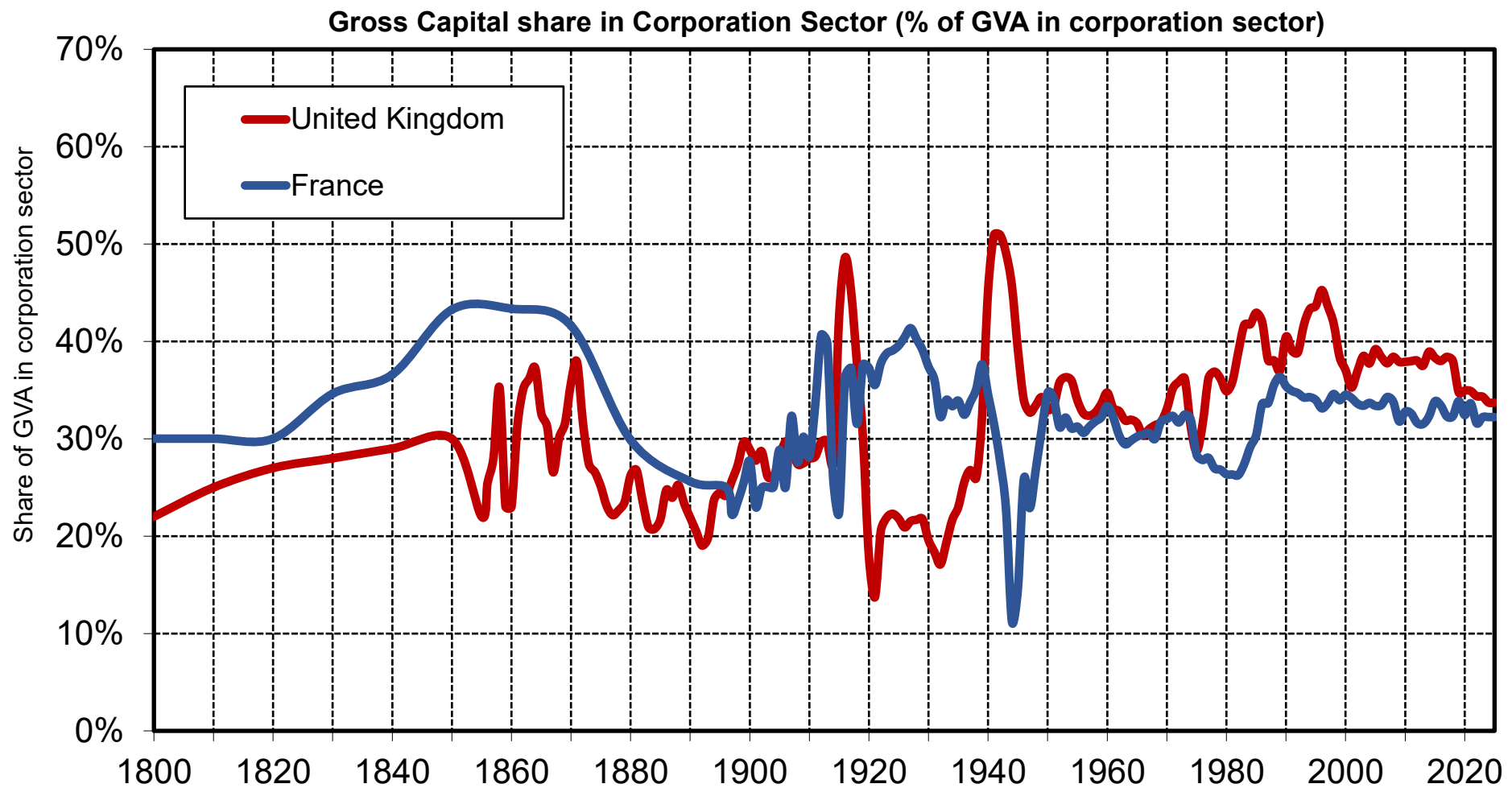


Sources and series: see wid.world

CFC in household sector (housing rent & other operating surplus) (% total factor-price GDP)

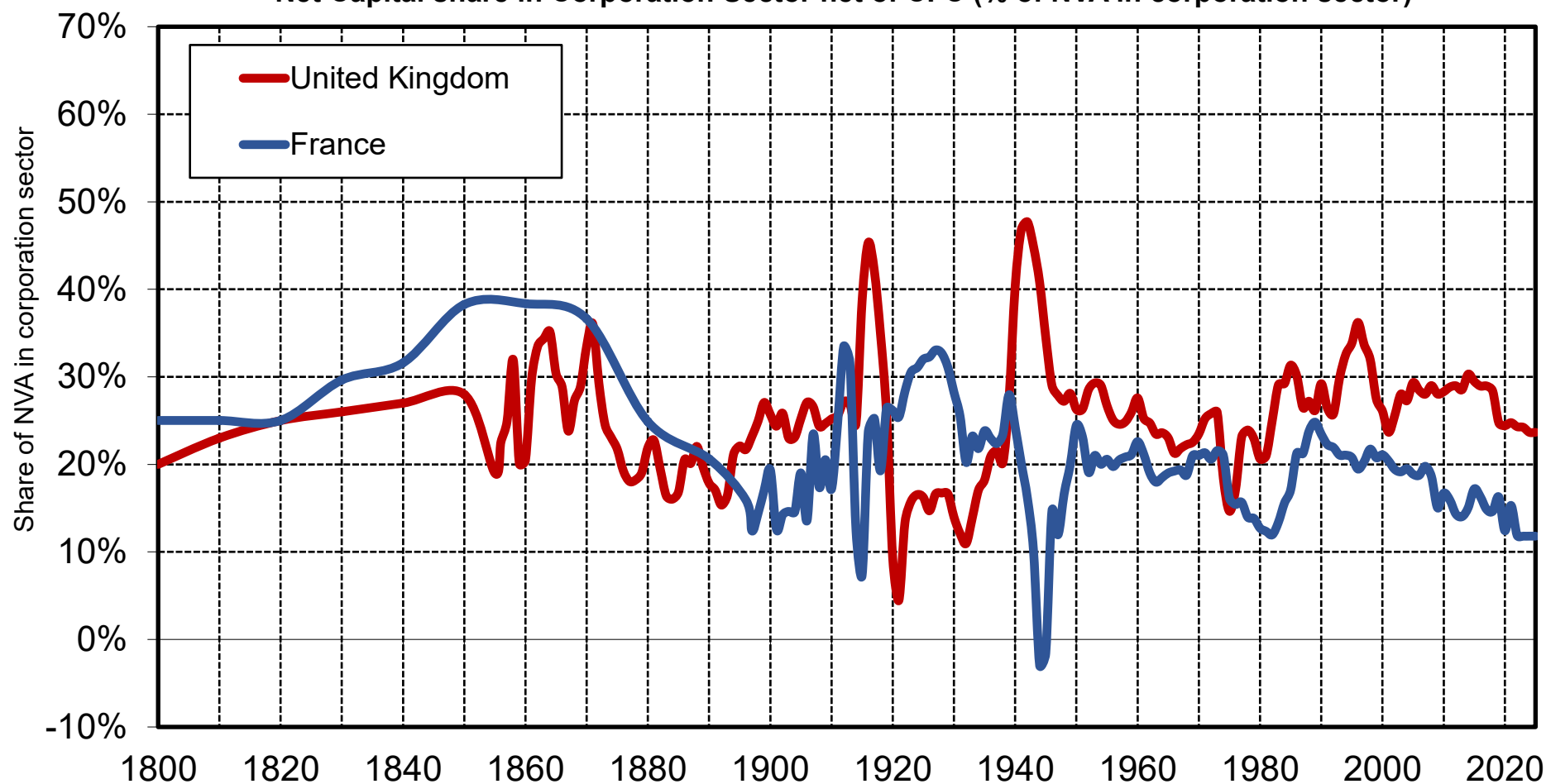


Sources and series: see wid.world



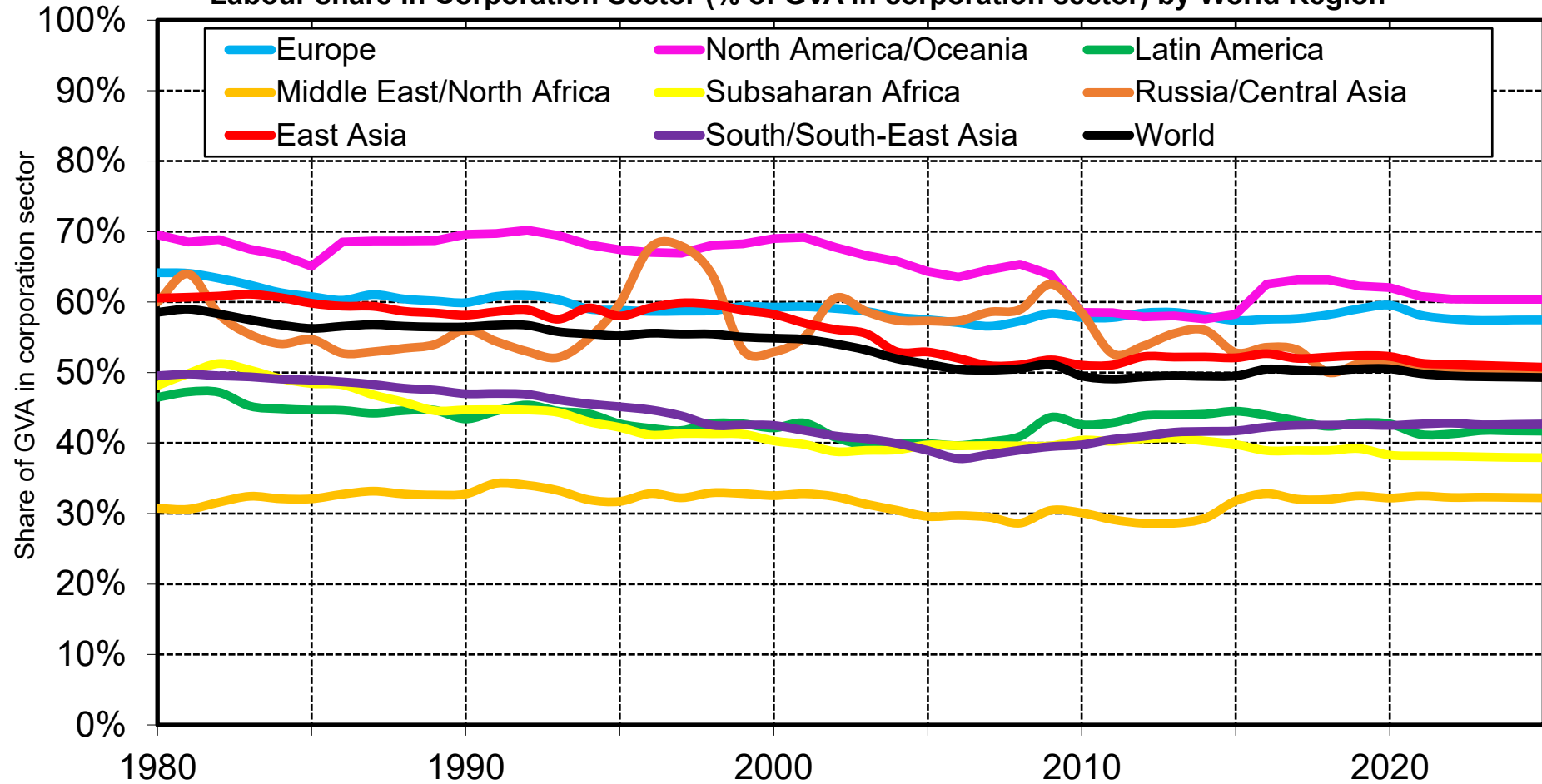
Interpretation. We observed large variations in the gross corporate capital share in the UK and France over the past two centuries: a large rise between 1800 and 1860-1870 (the so-called Engel's wage pause), a decline between 1860-1870 and 1890-1900, a rise between 1890-1900 and 1910-1920, followed by a relatively chaotic evolution during world wars and the interwar period (and a general decline between 1910-1920 and 1970-1980) and a rise since the 1970s-1980s. **Sources and series:** see wid.world

Net Capital share in Corporation Sector net of CFC (% of NVA in corporation sector)



Interpretation. The historical variations in the net corporate capital share in the UK and France broadly follow those of the gross corporate capital shares, with the additional complication that corporate CFC varies substantially over time (general upward trend) and across countries (with substantially larger CFC in France as compared to the UK in the recent period, which might partly reflect different measurement methods between national statistical institutes. **Sources and series:** see wid.world

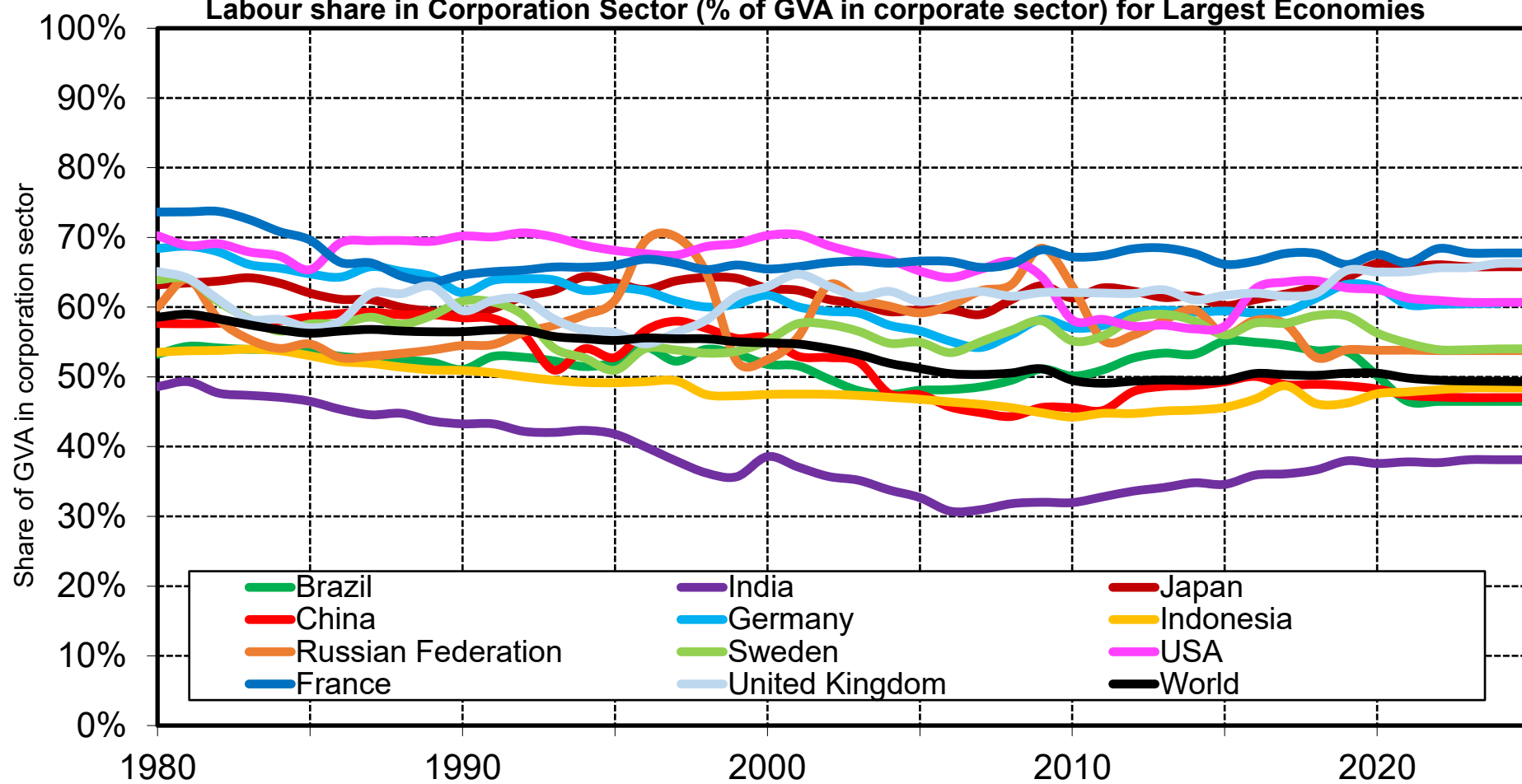
Labour share in Corporation Sector (% of GVA in corporation sector) by World Region



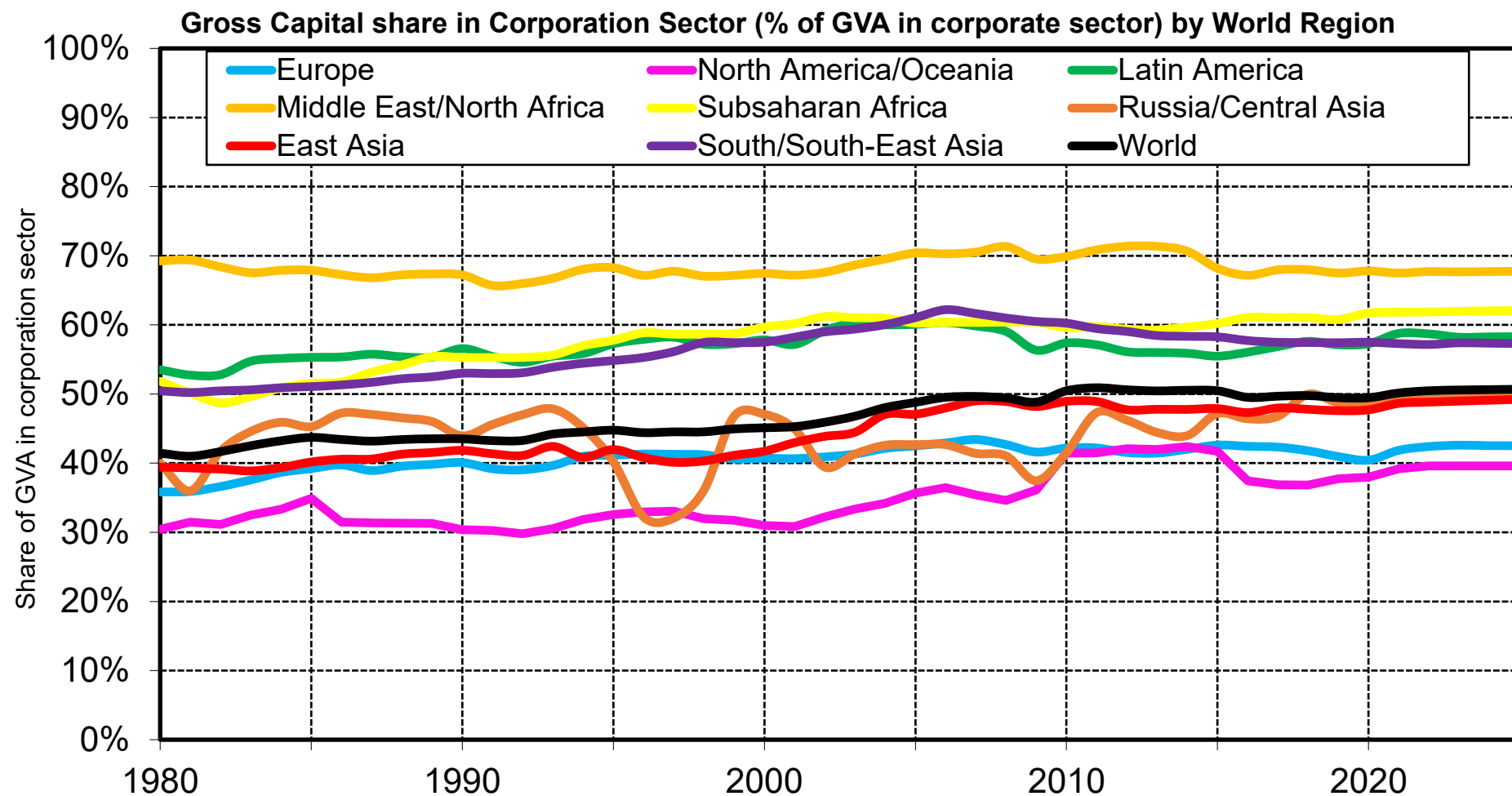
Interpretation. Since the 1980s we observe substantially smaller labour shares the corporate sector in MENA, South & South East Asia, Subsaharan Africa and Latin America than in Europe and North America/Oceania.

Sources and series: see wid.world

Labour share in Corporation Sector (% of GVA in corporate sector) for Largest Economies



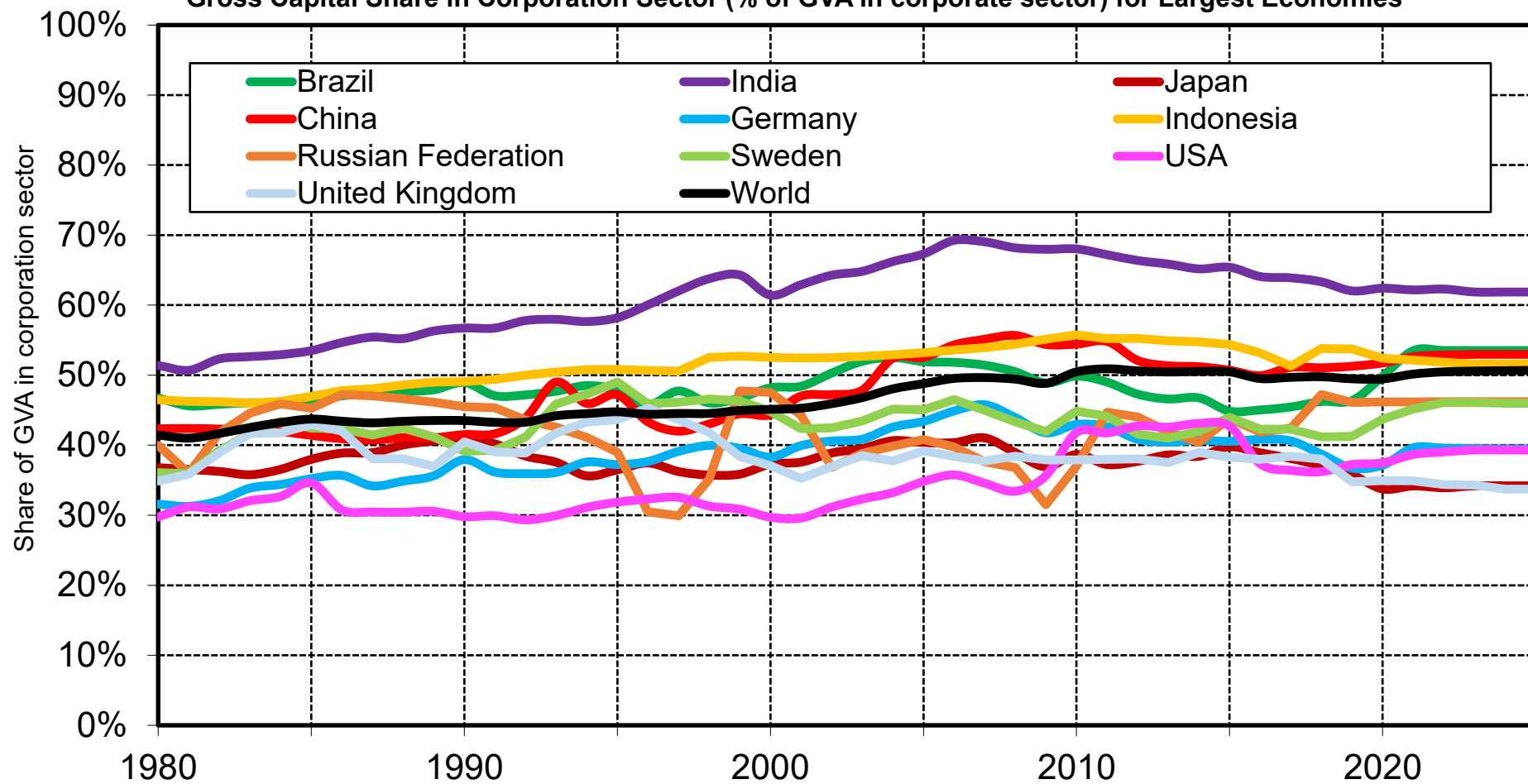
Sources and series: see wid.world



Interpretation. Since the 1980s we observe substantially larger capital shares the corporate sector in MENA, South & South East Asia, Subsaharan Africa and Latin America than in Europe and North America/Oceania.

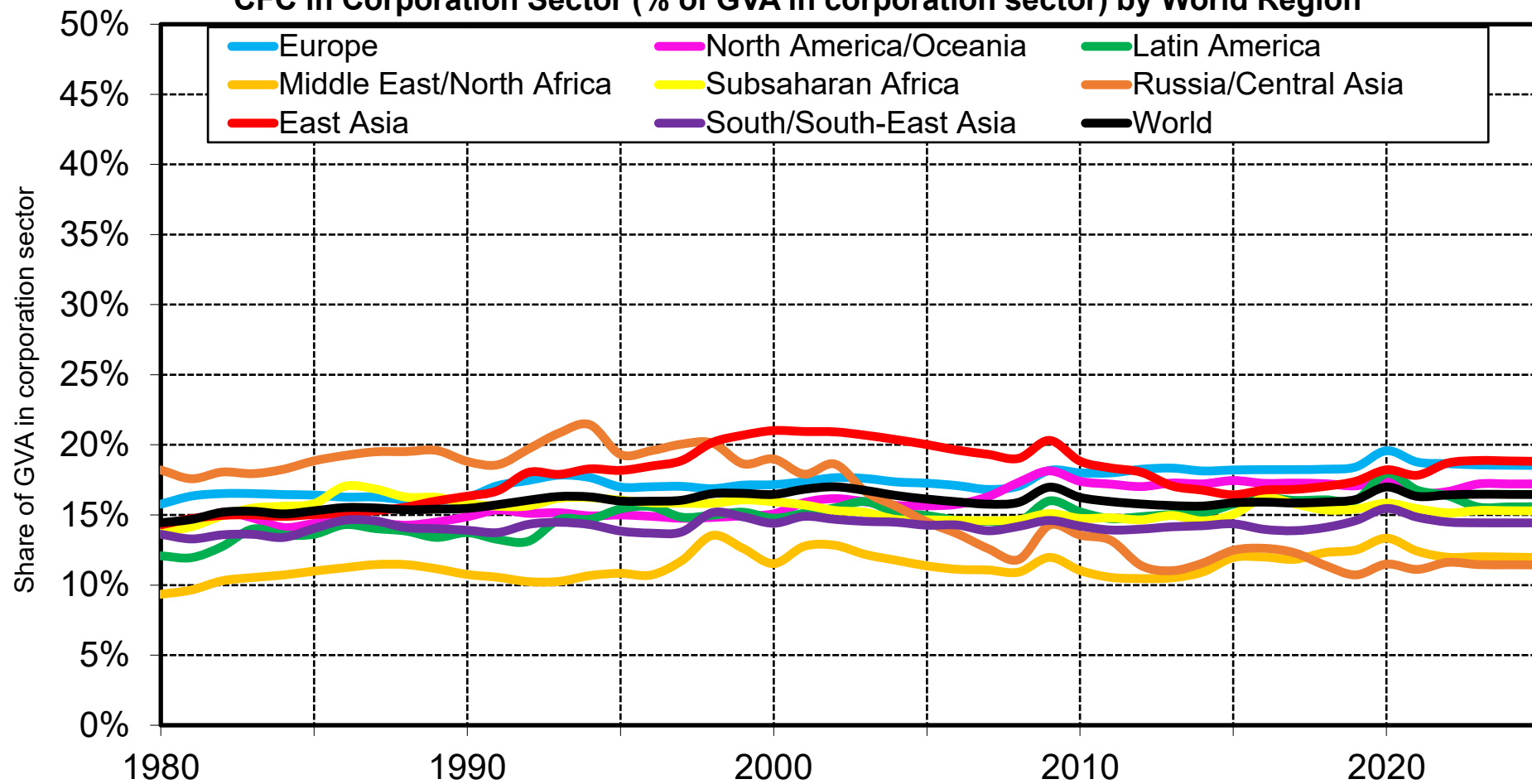
Sources and series: see wid.world

Gross Capital Share in Corporation Sector (% of GVA in corporate sector) for Largest Economies



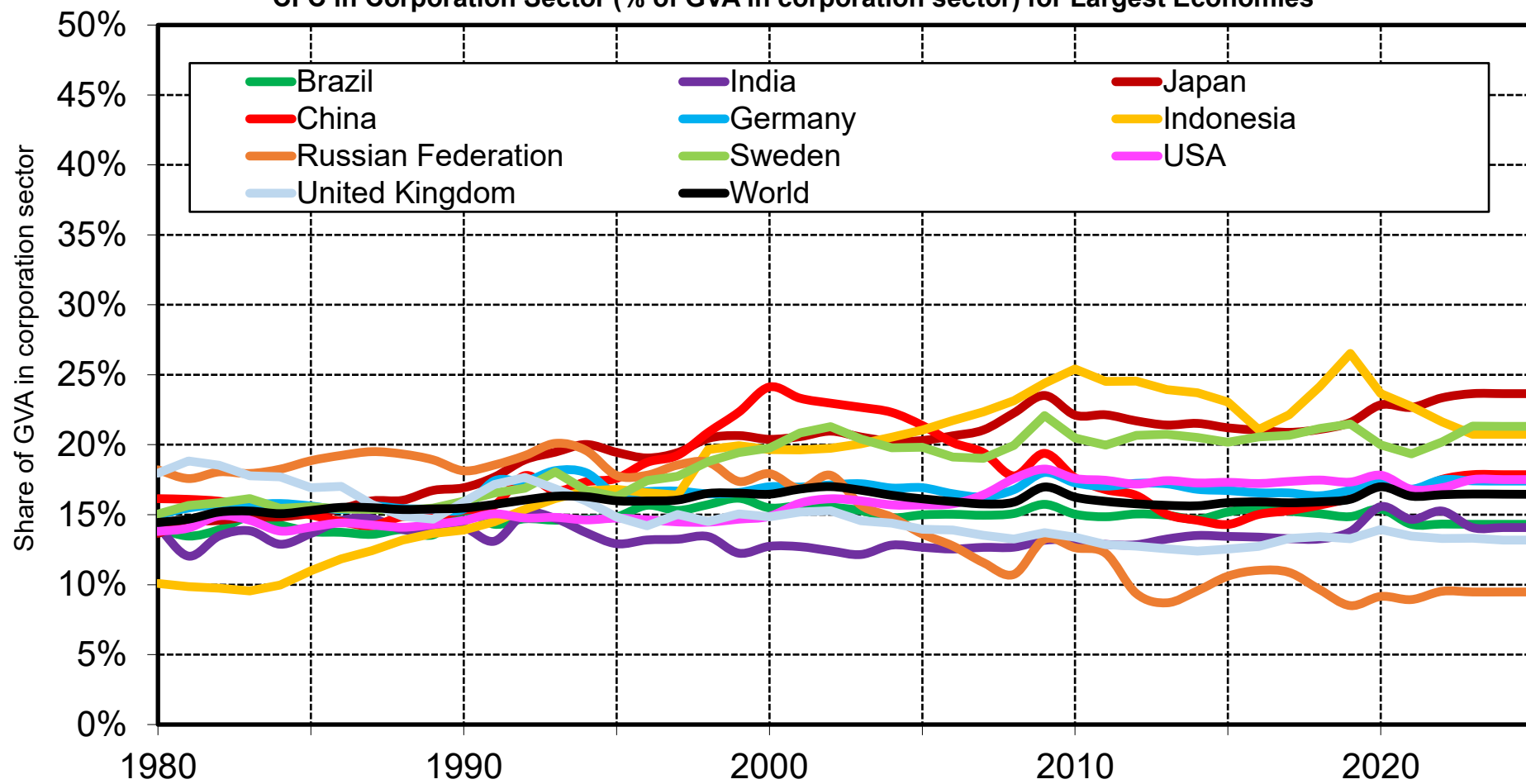
Sources and series: see wid.world

CFC in Corporation Sector (% of GVA in corporation sector) by World Region



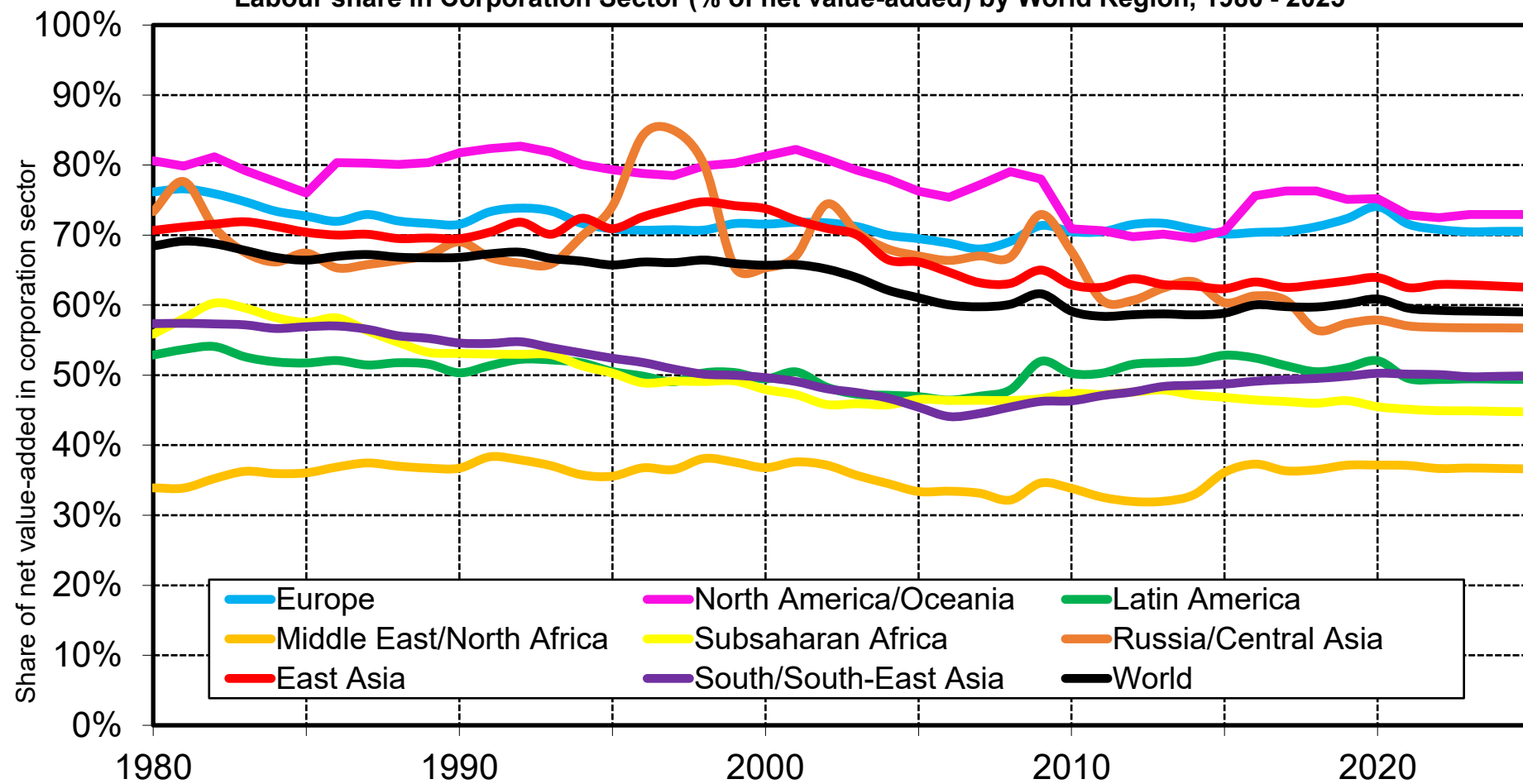
Sources and series: see wid.world

CFC in Corporation Sector (% of GVA in corporation sector) for Largest Economies



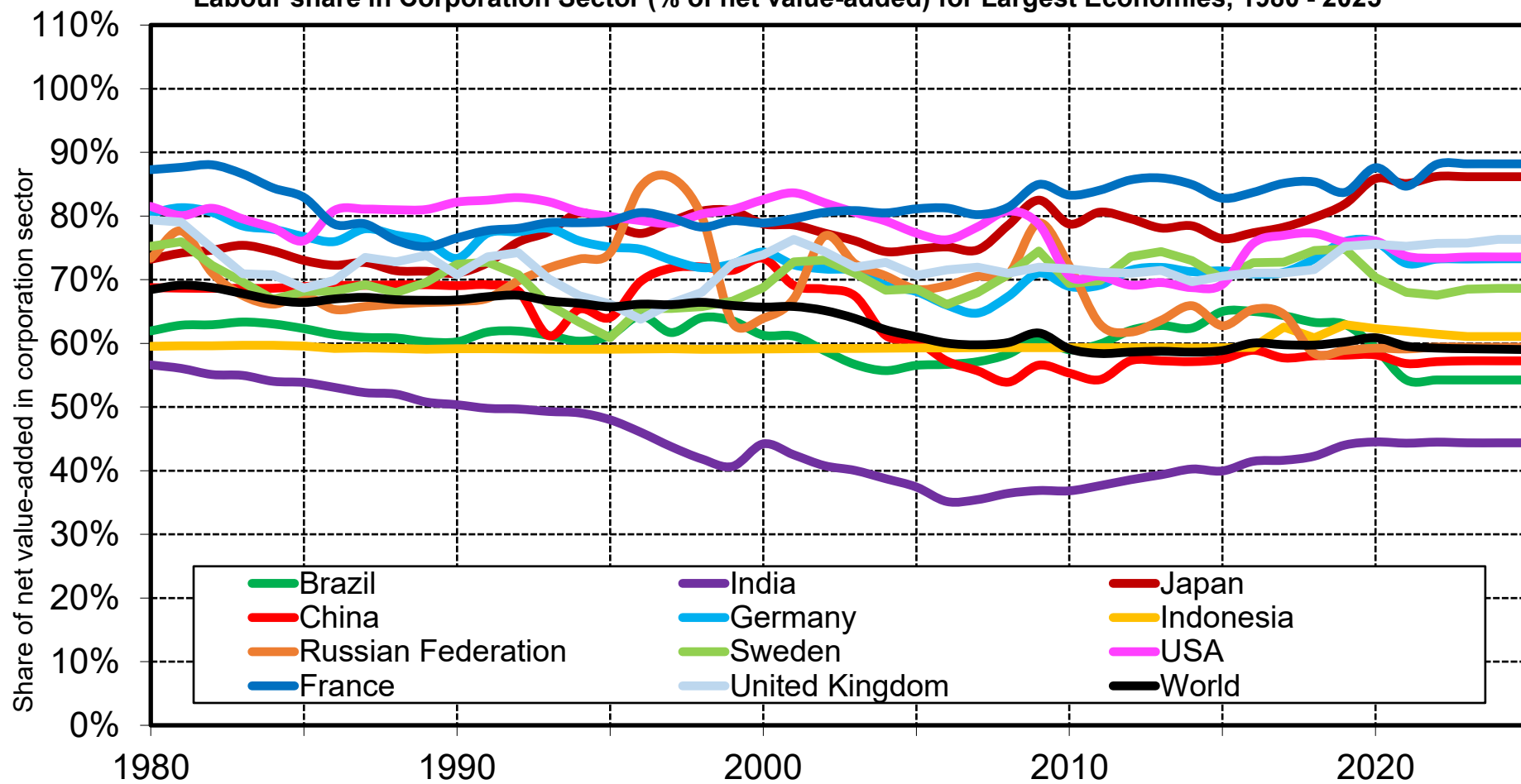
Sources and series: see wid.world

Labour share in Corporation Sector (% of net value-added) by World Region, 1980 - 2025



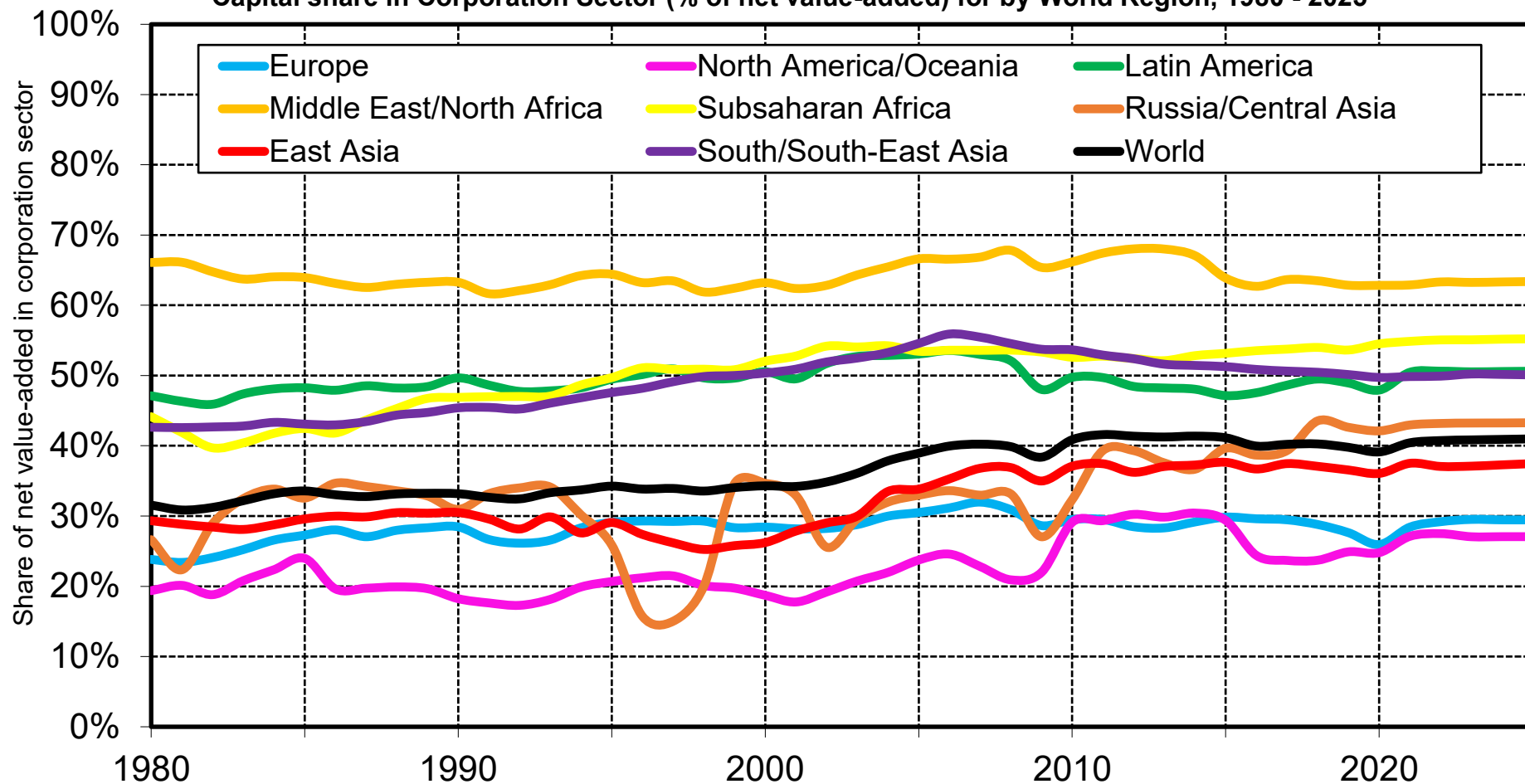
Sources and series: see wid.world

Labour share in Corporation Sector (% of net value-added) for Largest Economies, 1980 - 2025



Sources and series: see wid.world

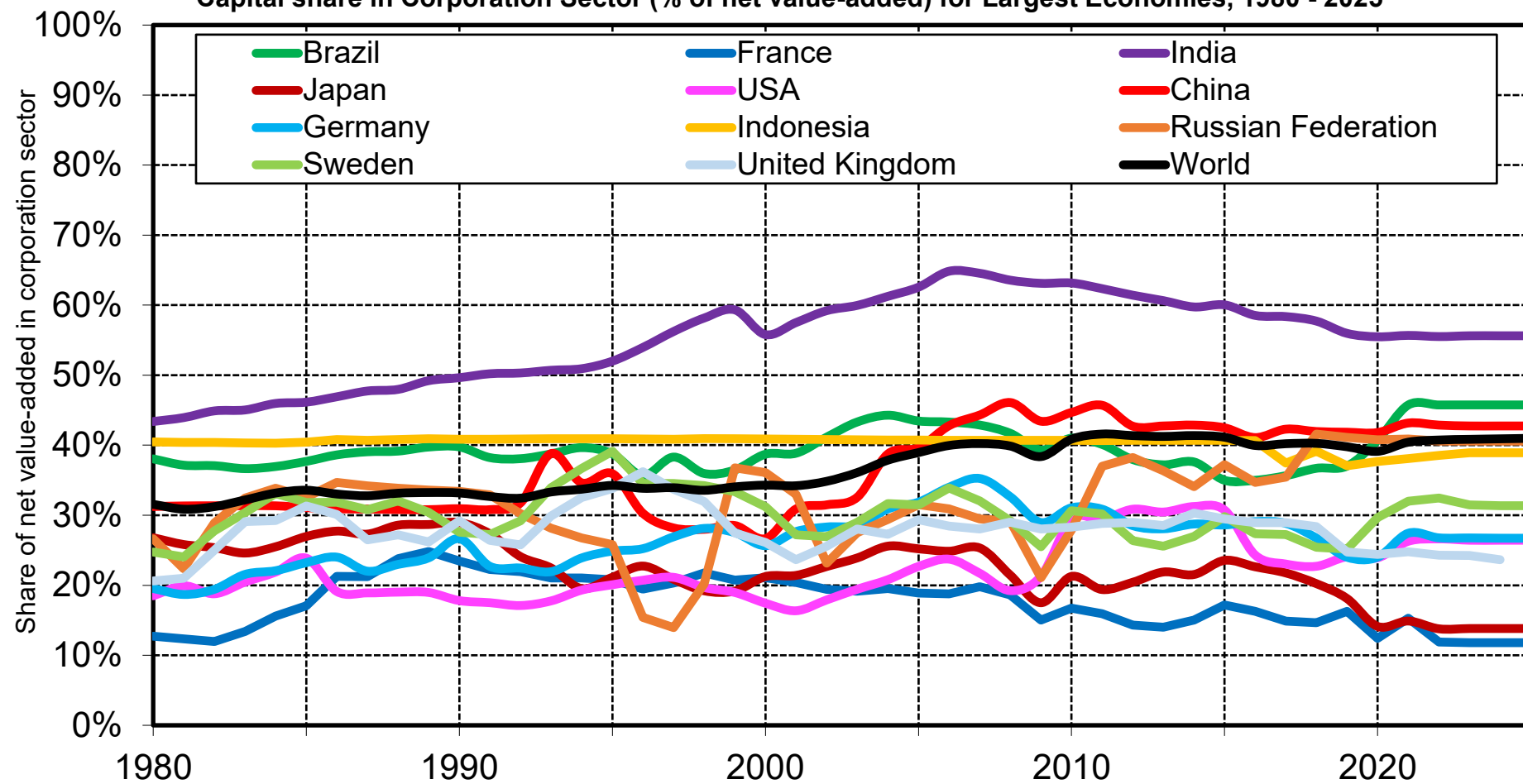
Capital share in Corporation Sector (% of net value-added) for by World Region, 1980 - 2025



Interpretation: This Figure shows the net operating surplus in the corporate sector as a share of net value-added in the corporate sector. North America and Europe have the lowest net capital share in the corporate sector of about 30% of corporate net value added. In MENA it is constant on a very high level.

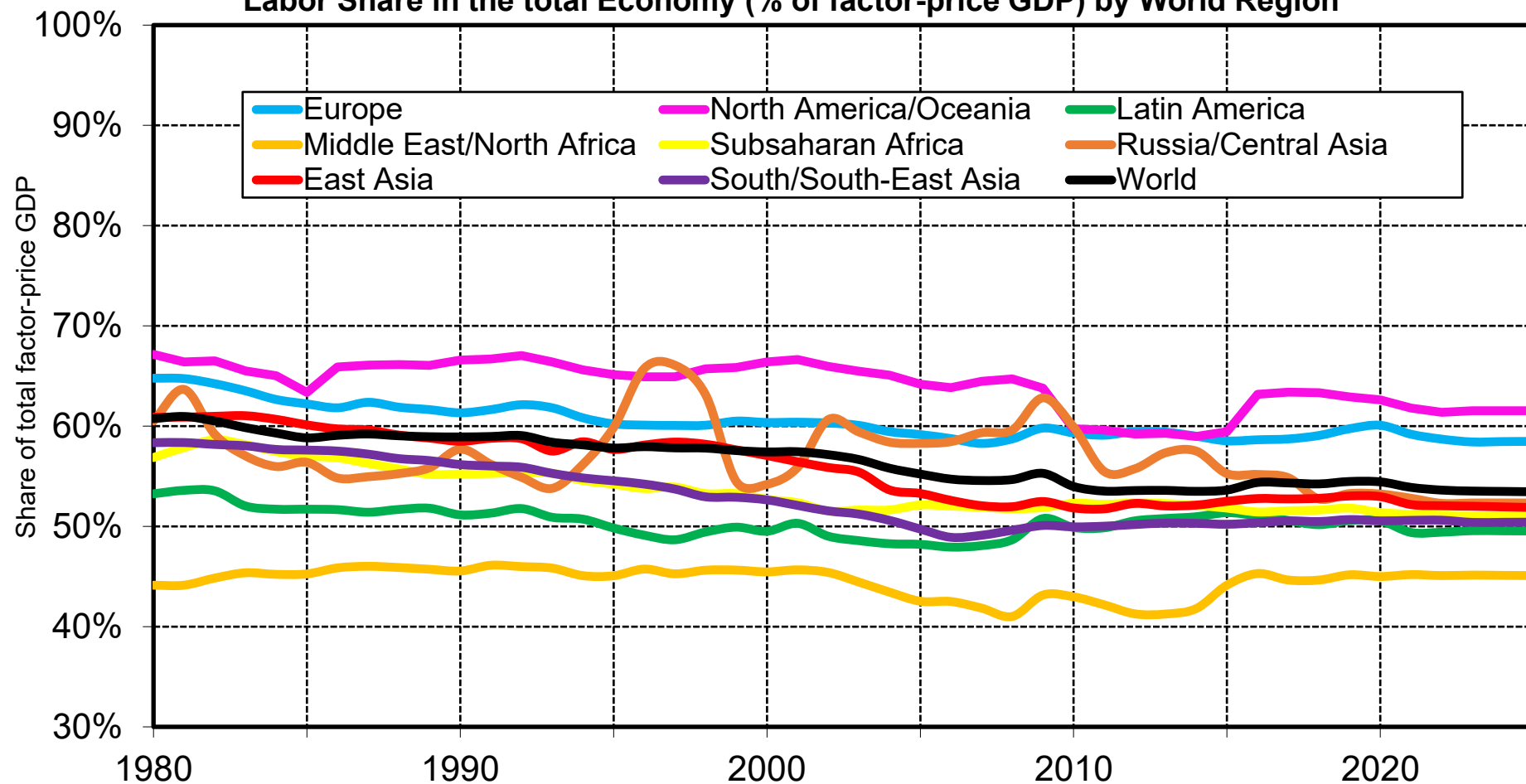
Sources and series: see wid.world

Capital share in Corporation Sector (% of net value-added) for Largest Economies, 1980 - 2025



Sources and series: see wid.world

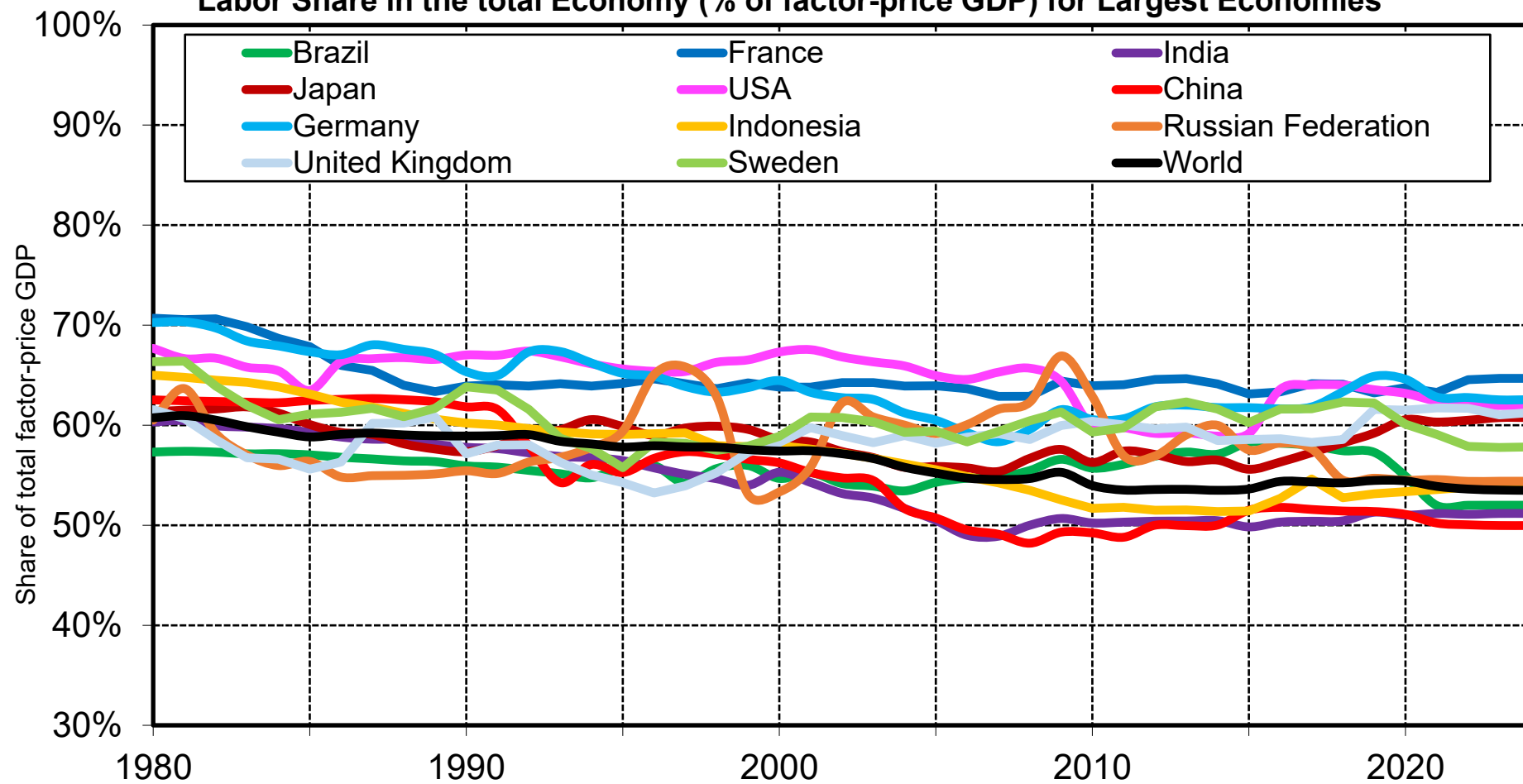
Labor Share in the total Economy (% of factor-price GDP) by World Region



Interpretation: This figure shows the labor share in the total Economy as a share of factor-price GDP. The gross labour share is defined as the sum of compensation of employees in all sectors and 60% of gross mixed income divided by factor-price GDP.

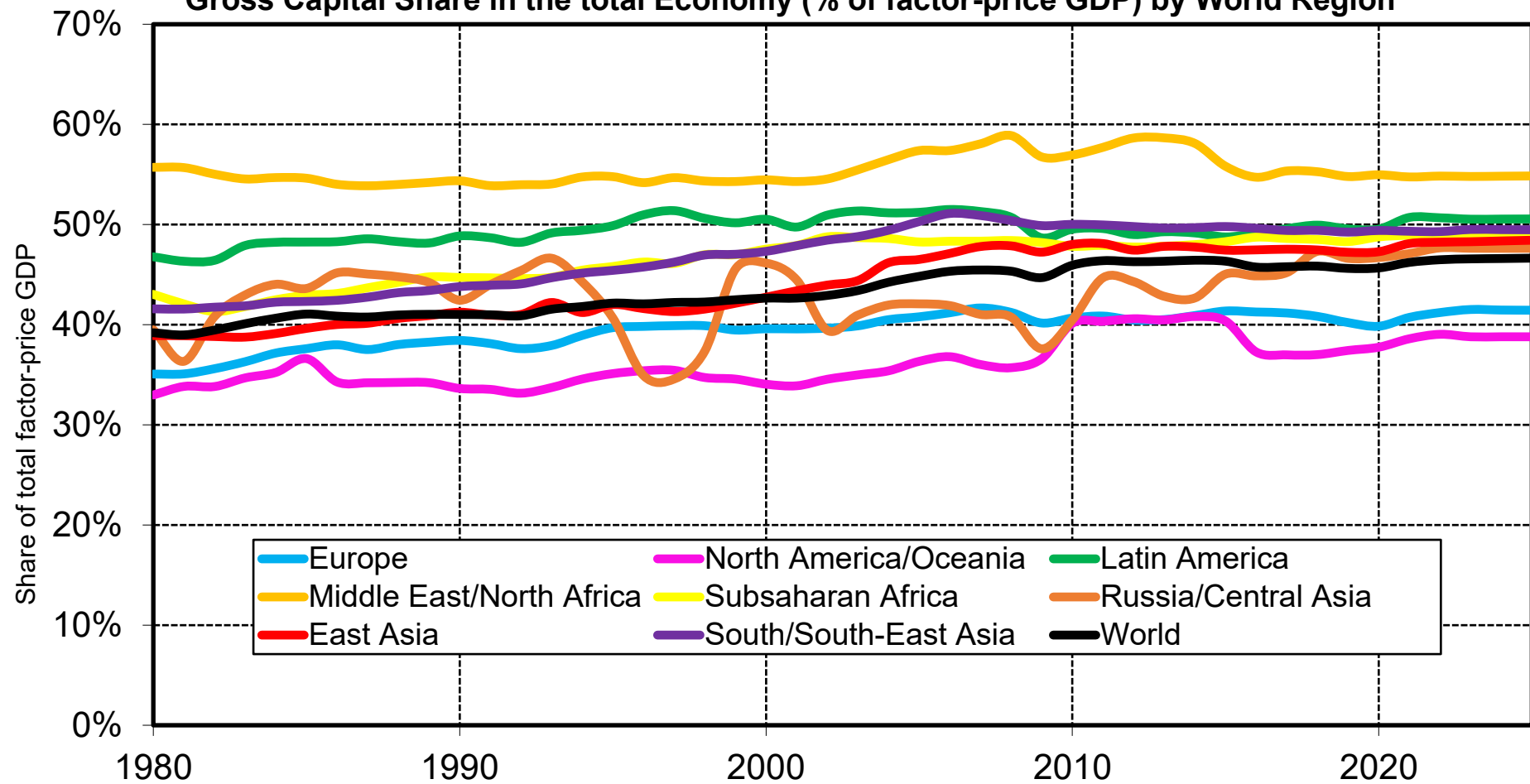
Sources and series: see wid.world

Labor Share in the total Economy (% of factor-price GDP) for Largest Economies



Sources and series: see wid.world

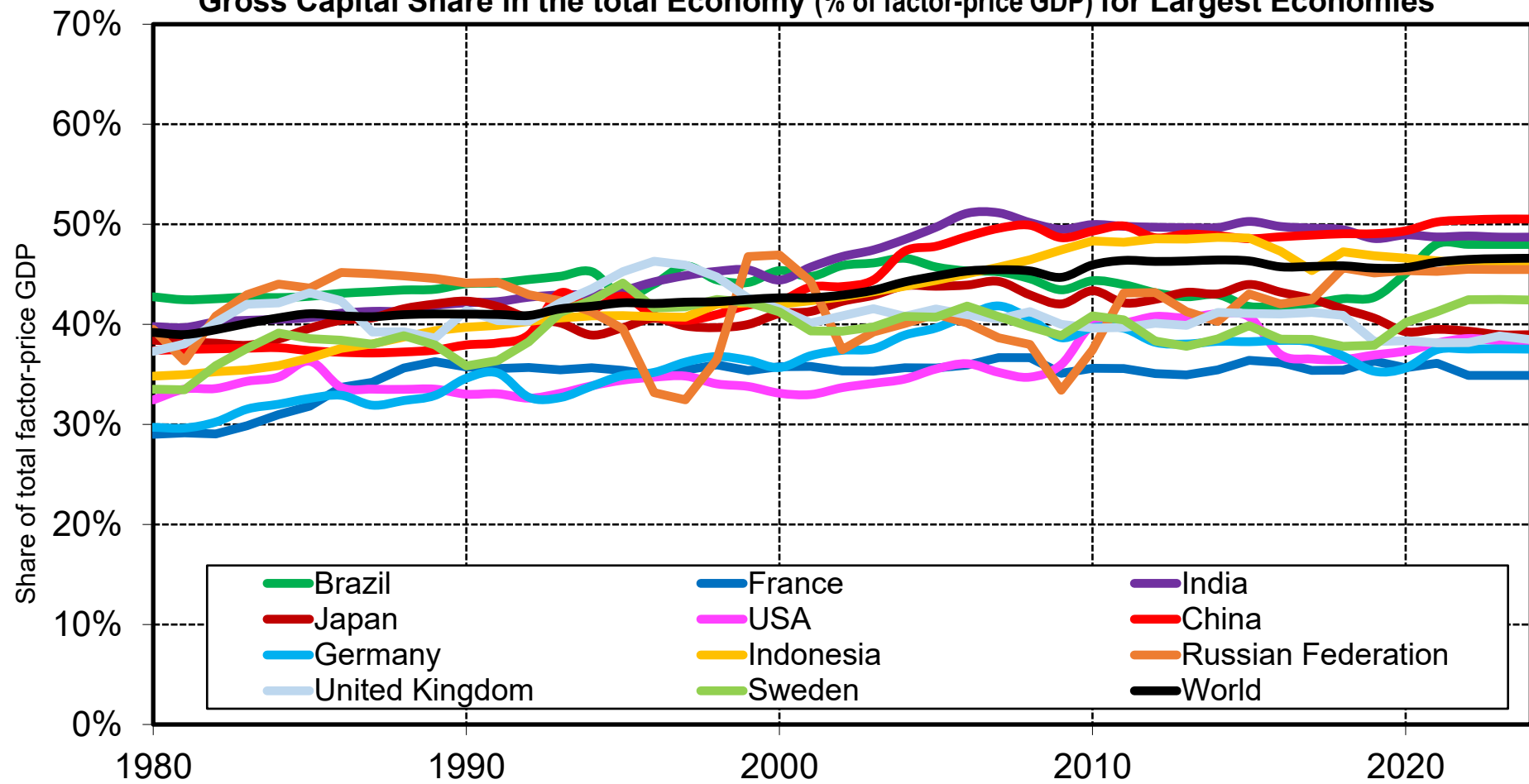
Gross Capital Share in the total Economy (% of factor-price GDP) by World Region



Interpretation: The gross capital share has increased in all regions in recent decades. This trend also reflects the increasing levels of CFC as share of GDP. The gross capital share is defined as the operating surplus in the corporate and household sector, and 40% of mixed income divided by factor-price GDP.

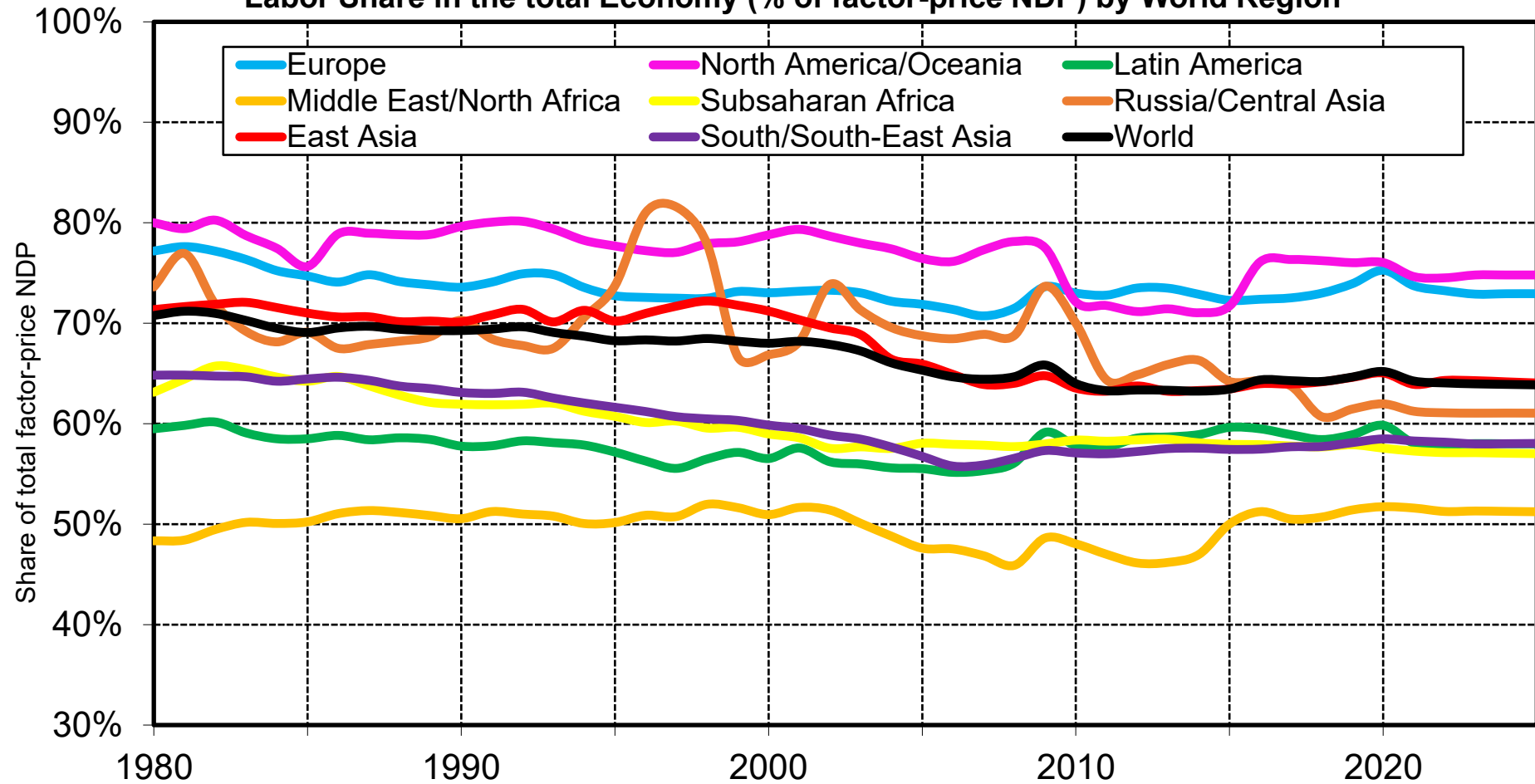
Sources and series: see wid.world

Gross Capital Share in the total Economy (% of factor-price GDP) for Largest Economies



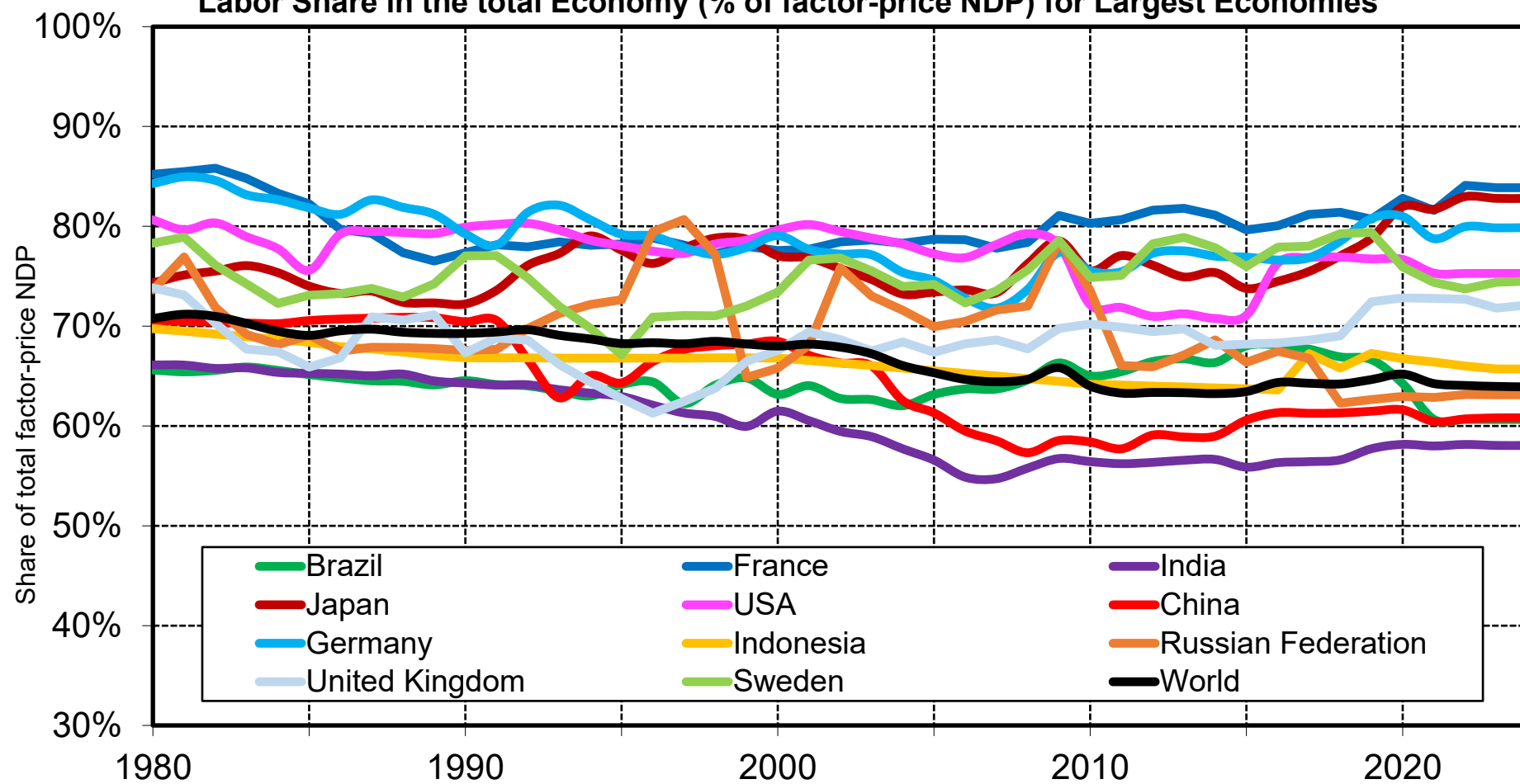
Sources and series: see wid.world

Labor Share in the total Economy (% of factor-price NDP) by World Region



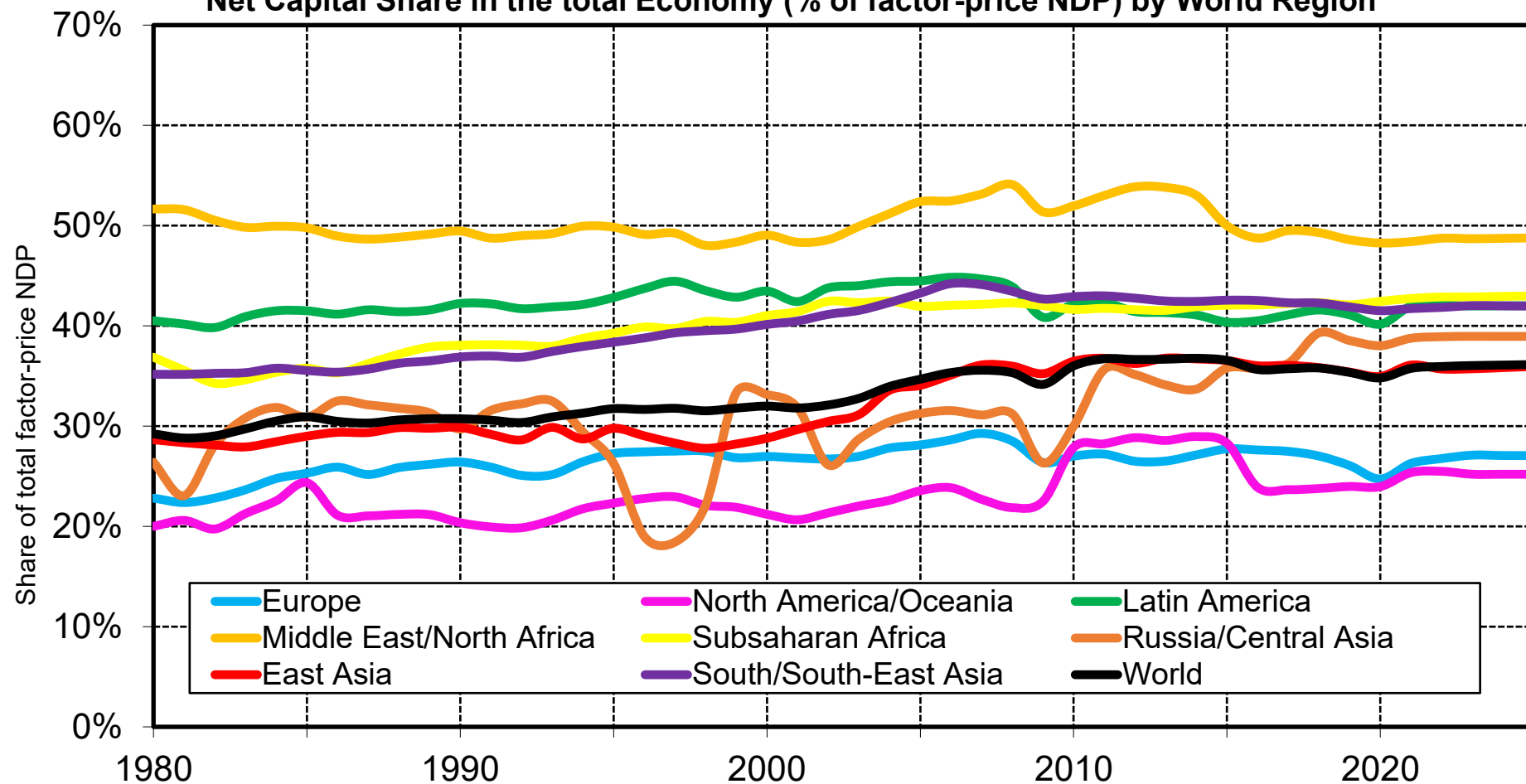
Interpretation: The labour share in factor-price NDP declined in most region since the 1980s. There are very large regional variations. We also observe the much discussed decline in the labour share in the US, however the net labour share in Europe and North continue to be on a high level compared to other regions. MENA has the lowest net labour shares, driven by oil producing countries. The labour share in factor-price NDP is defined as the sum of compensation of employees in all sectors and 60% of gross mixed income divided by factor-price NDP (net of CFC). **Sources and series:** see wid.world

Labor Share in the total Economy (% of factor-price NDP) for Largest Economies



Sources and series: see wid.world

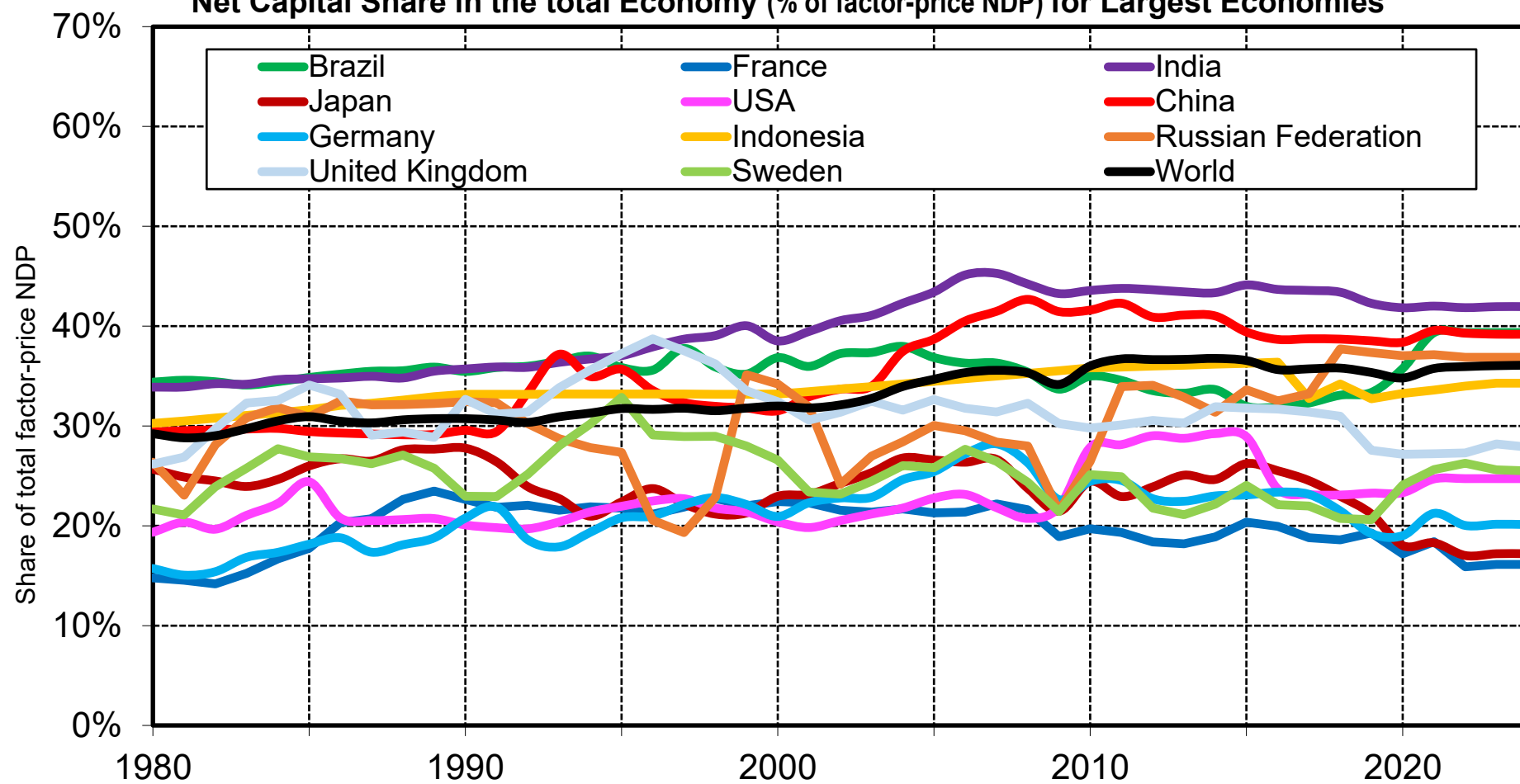
Net Capital Share in the total Economy (% of factor-price NDP) by World Region



Interpretation: The capital share net of CFC increased in most region since the 1980s. There are very large regional variations. We observe the much discussed increasing capital share in the US, however North America and Europe still have a low capital share compared to other regions. MENA has the highest net capital shares, driven by oil producing countries.

Sources and series: see wid.world

Net Capital Share in the total Economy (% of factor-price NDP) for Largest Economies



Sources and series: see wid.world