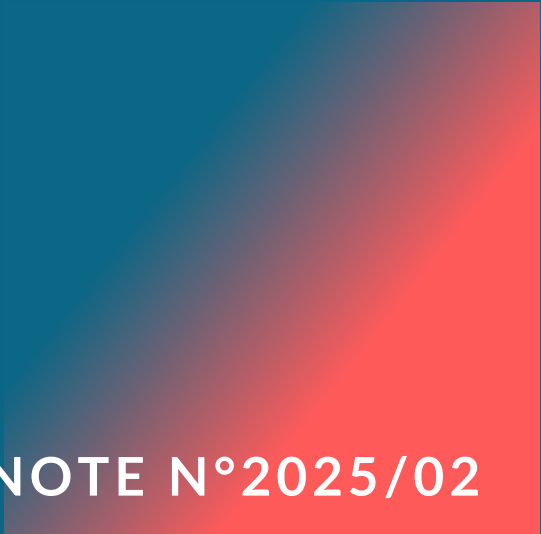


**WID NATIONAL ACCOUNTS SERIES:
UPDATED AND EXTENDED
COVERAGE 1800-2023**

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**WORLD
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**WID National Accounts Series:
Updated and Extended Coverage 1800-2023**

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Abstract. This technical note describes the new extended set of national accounts series available in the World Inequality Database, including series on nominal and real GDP, price indexes, exchange rates, trade balance, balance of payment and foreign income and foreign wealth. All series cover the entire world, which is defined as a sum of stable set of 57 core territories (48 main countries + 9 residual regions) over the 1800-2023 period. All series are annual over the 1800-2023 period and will be updated on a yearly basis.

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1. Introduction

This technical note briefly describes the new extended set of national accounts series available in the World Inequality Database, including series on nominal and real GDP, price indexes, exchange rates, trade balance, balance of payments, foreign income & foreign wealth covering 57 core territories (48 main countries + 9 residual regions) over the 1800-2023 period.

These series were constructed by combining already existing WID series with new data sources on historical national accounts, trade flows and the world balance of payments which were recently collected and homogenized by Nievas and Piketty (2025). All technical details about the raw data sources, methods and concepts used to construct these series are explained in the technical appendices and replication package released by Nievas and Piketty (2025).¹ In this technical note we provide additional information on the way these series have been integrated into WID.

2. Geographical Coverage

All series cover the entire world, which is defined as a sum of stable set of 57 core territories (48 main countries + 9 residual regions) over the 1800-2023 period. This new definition of core territories replaces definition previously used in WID, which was introduced by Chancel and Piketty (2021) and included 33 core territories (24 main countries + 9 residual regions) (see Table 1).

Note in particular that the 9 residual regions (country codes OC, QM, OH, OD, OE, OJ, OC, OA, OI) now have a new definition in terms of country coverage and replace the definition previously used in WID.

The main advantage of the new definitions of core territories is that we include more individual countries, especially in South & South-East Asia and Subsaharan Africa. The share of the 48 main countries in world population and world GDP (measured either with market exchange rates or purchasing power parities) appears to be relatively stable around 85-90% throughout the 1800-2023 period (see Figure 1). For the remaining 10-15% contained in the residual regions, available data sources are not sufficiently detailed so as to include long run series for all underlying countries – except for the 1970-2023 period, where we provide annual series for all 216 core countries (including the 168 countries making the 9 residual regions), which allows us to compute

¹ See also the dedicated website of the World Historical Balance of Payments Database (wbop.world).

exact totals for the residual regions.² For the 1800-1970 period, country-level series are available for some territories at some point in time, where we do observe good quality data. We make sure that the residual region figures are consistent with what we observe.

3. Variables Coverage

One important feature of the new series is that they cover nominal and real GDP annual series as well as price indexes, market exchange rates, purchasing power parities and real exchange rates throughout the 1800-2023 period. In particular, this allows us to compare the levels of per capita GDP across the world over the 1800-2023 period, both in PPP and MER terms (see Figures 2a-2c and 3a-3b). These series were obtained by combining previous WID series (see in particular Chancel and Piketty (2021) and Moshrif et al (2024)) with new historical national accounts series (stemming from the extended version of the Maddison database and other country series; see Nievas and Piketty (2025) for all details).

As usual with WID series, LCU series are reported using the latest currency applied in a given country (e.g. France's LCU series are all expressed in euros, including before the introduction of the euro in 1999). One novelty of the new series is that we also include a new variable that reports LCU change indicator, allowing to compute values in historical currencies and the inclusion of a time varying exchange rate (USD/TLCU).

Another important novelty is that we now use USD (US \$) as conventional LCU for the 9 residual regions (see Table 1) as well as for the 9 continental regions (World, Europe, North America/Oceania, Latin America, Middle East/North Africa, Sub-Saharan Africa, Russia/Central Asia, East Asia, South & South-East Asia). In effect, world regions (i.e. residual regions and continental regions) are now treated in the same manner as the 216 countries/jurisdictions. In particular, they have well-defined price indexes, market exchange rates and purchasing power parities.³ Using these series, we can compute the evolution of real exchange rates relative to USD not only over the 1970-2023 period, as our previous WID series already allowed us to do, but over the entire 1800-2023 period (see Figures 4a-4b). As one can see, the price level has generally been higher in the US than in other parts of the world, except during the US Civil War, when the USD exchange rate relative to other main currencies dropped sharply.

² For the full list of 216 core countries, see Moshrif et al (2024) and wid.world/code-dictionary.

³ Note however that we still need to distinguish between MER and PPP codes for world regions. This is further explained in Arias-Orsorio et al (2025).

It should be noted however that our market exchange rate series do not have complete coverage for the 1800-1970 period, and particularly for the 1800-1910 period. Due to missing sources and/or the complexity of monetary regimes (sometimes with multiple parallel currencies, and in particular different currencies for domestic and international exchanges), we use USD as conventional LCU for a number of countries before a certain date (in effect assuming a peg to USD before a certain date). This partly explains why real exchange rates appear to vary relatively little in earlier periods according to Figure 4a. As new series on exchange rates and LCU GDP become available, we will revise our estimates accordingly.

For similar reasons, our USD/LCU series for market exchange rates and purchasing power parities cover the full 1800-2023 period. We are able to reconstruct the corresponding series for EUR/LCU and CNY/LCU for the 1800-2023 period by dividing the USD/LCU by the USD/EUR series (and USD/LCU by the USD/CNY series). Note that EUR does not exist before 1999, so over the 1800-1998 period we define a conventional EUR by using an average, weighted by GDP at constant prices, of Germany, Spain, France, Italy and the Netherlands, which are the only Euro countries in our 57 core territories. The resulting long-run evolutions for market exchange rates and purchasing power parities for dollar/pound, euro/dollar, dollar/rupee and dollar/yuan over the 1800-2023 period are reported on Figures 5-8.

Apart from the series on nominal and real GDP, price indexes and exchange rates, we also provide for all 57 core territories annual 1800-2023 series on imports, exports and trade balance for goods (primary commodities vs manufactured goods) and services, inflows and outflows of foreign income and foreign transfers, foreign wealth, assets and liabilities, CFC, NDP and NNI. Note that all series are internally consistent at the global level, i.e. they sum to zero when they should, following the methods developed by Nievas and Sodano (2024) and Nievas and Piketty (2024, 2025).

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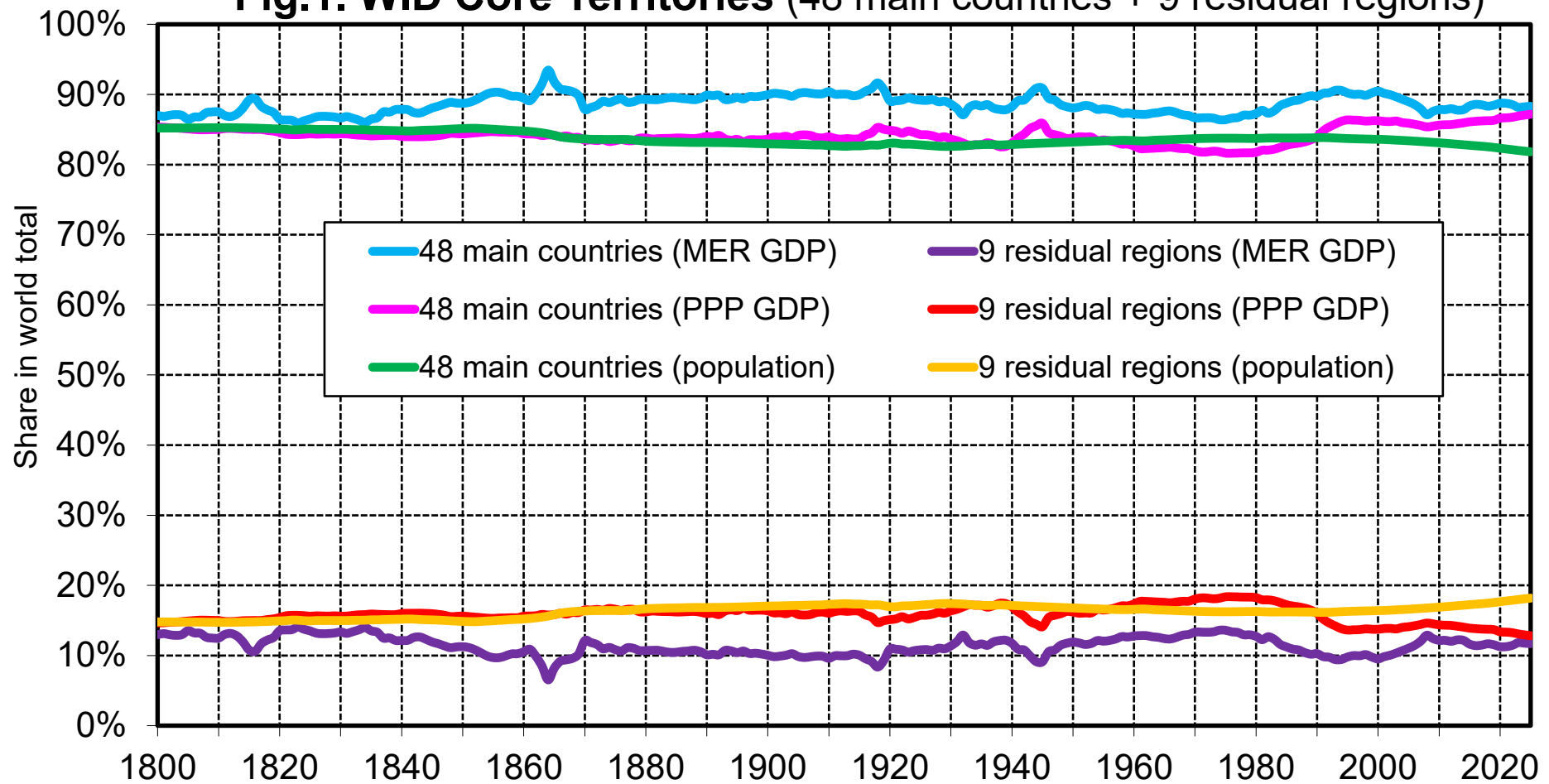
Nievas, G., & Sodano, A. (2024). Has the US exorbitant privilege become a rich world privilege? Rates of return and foreign assets from a global perspective, 1970–2022 (WIL Working Paper No. 2024/14).

Table 1. New Definition of Core Territories Used in the World Inequality Database

Core Territories: Old Definition (33 core territories = 24 main countries + 9 residual regions)		Core Territories: New Definition (57 core territories = 48 main countries + 9 residual regions)	
East Asia (3)	China, Japan Other EASA	East Asia (5)	China, Japan, South Korea, Taiwan Other EASA (OA)
Europe (8)	Britain, France, Germany, Italy, Spain Sweden, Other W.EUR Other E.EUR	Europe (11)	Britain, Denmark, France, Germany, Italy, Netherlands, Norway, Spain, Sweden, Other W.EUR (OC) , Other E.EUR (QM)
Latin America (6)	Argentina, Brasil, Chile, Colombia Mexico, Other LATAM	Latin America (6)	Argentina, Brasil, Chile, Colombia Mexico, Other LATAM (OD)
Middle East/ North Africa (4)	Algeria, Egypt, Turkey Other MENA	Middle East/ North Africa (8)	Algeria, Egypt, Iran, Morocco, Saudi Arabia, Turkey, UAE, Other MENA (OE)
North America/ Oceania (5)	USA, Canana, Australia, New Zealand Other NAOC	North America/ Oceania (5)	USA, Canana, Australia, New Zealand Other NAOC (OH)
Russia/ Central Asia (2)	Russia Other RUCA	Russia/ Central Asia (2)	Russia Other RUCA (OC)
South/South-East Asia (3)	India, Indonesia Other SSEA	South/South-East Asia (9)	Bengladesh, India, Indonesia, Myanmar, Pakistan, Philipinnes, Thailand, Vietnam, Other SSEA (OI)
Sub-Saharan Africa (2)	South Africa Other SSAF	Sub-Saharan Africa (11)	DR Congo, Ethiopa, Kenya, Ivory Coast Mali, Niger, Nigeria, Rwanda Sudan, South Africa, Other SSAF (OJ)

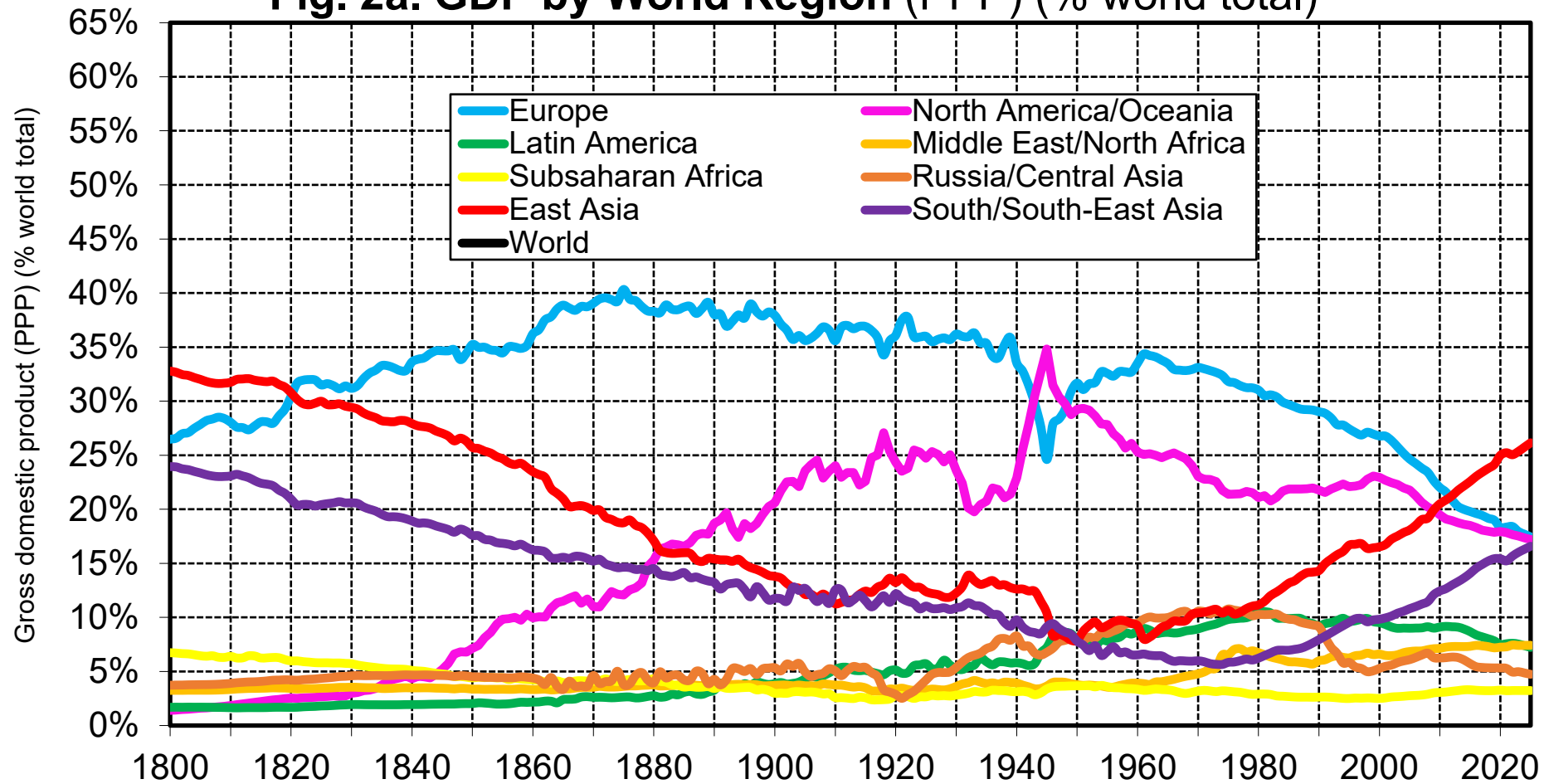
Interpretation. In the context of WID historical series, the world is decomposed into 57 core territories (48 main countries + 9 residual regions). This new definition is effective in WID series available online as of May 2025. In particular, the codes for residual regions (OA, OB, OC, OD, OE, OH, OI, OJ, QM) refer to the new definition in online series as of May 2025. This new series an extended version of the 33 core territories (24 main countries + 9 residual regions) first introduced by Chancel and Piketty (2021) and previously used in WID in 2021-2025.

Fig.1. WID Core Territories (48 main countries + 9 residual regions)



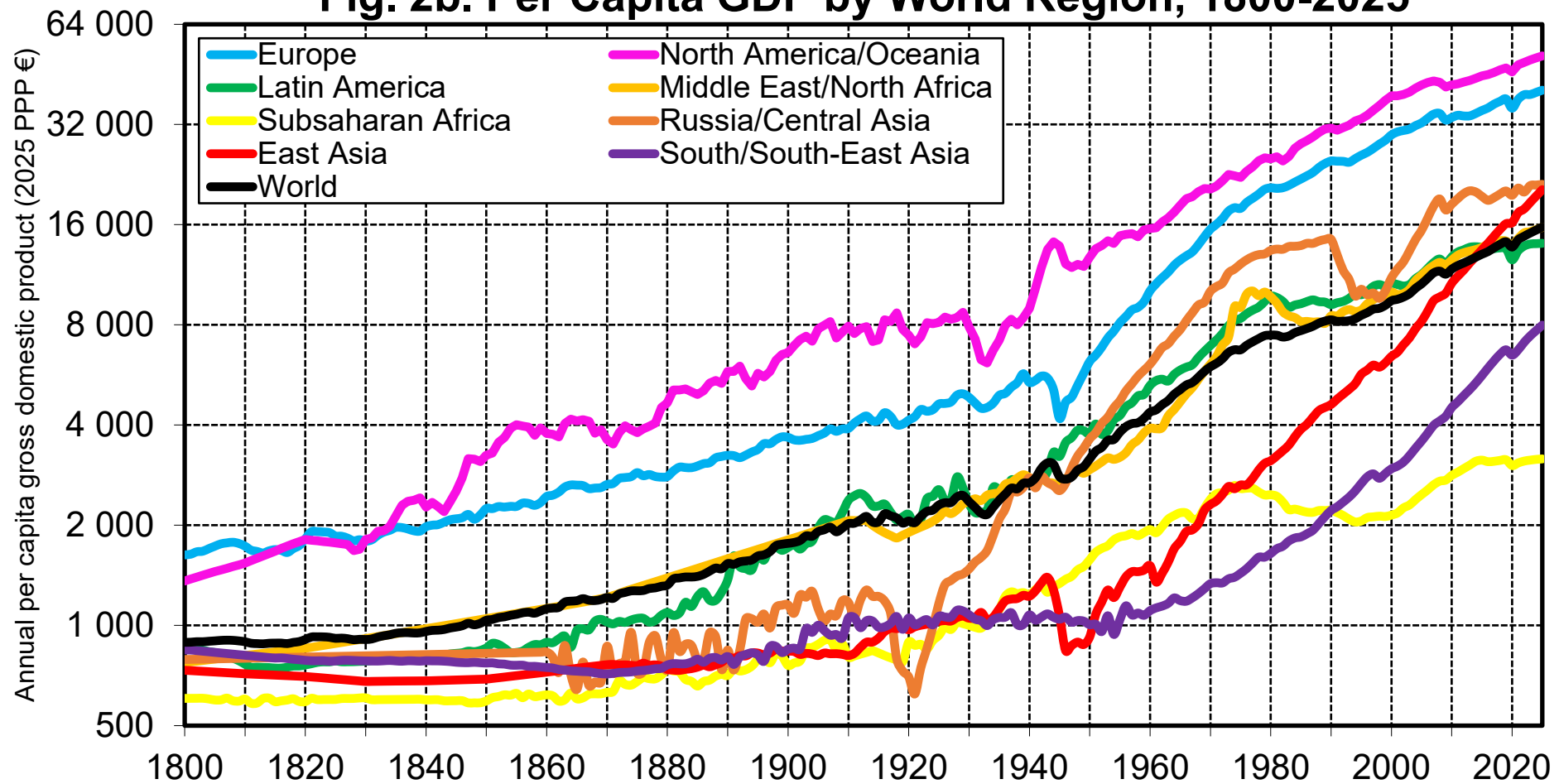
Interpretation. Historical WID national accounts include annual 1800-2025 series for 57 core territories (48 main countries + 9 residual regions, which we define using fixed 2025 borders). The 48 main countries make about 85-90% of the world GDP (both in market exchange rate and purchasing power parity) and population throughout the 1800-2025 period. For recent decades (1970-2025), WID national accounts series cover 216 countries/jurisdictions (168 of which form the 9 residual regions), again with fixed 2025 borders. **Sources and series:** see wid.world

Fig. 2a. GDP by World Region (PPP) (% world total)



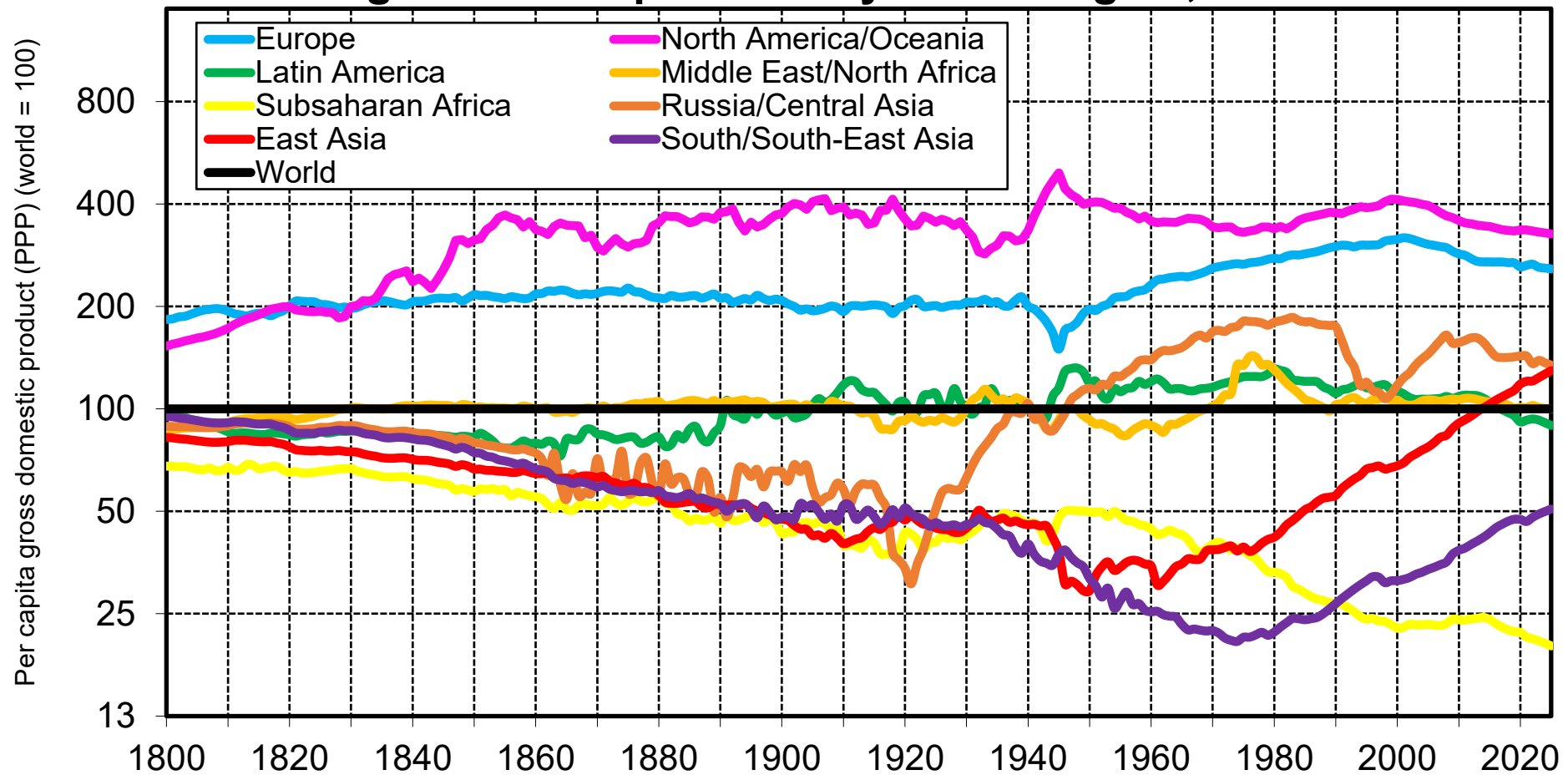
Interpretation. Using PPP values (purchasing power parity), North America/Oceania represents about 17% of world GDP in 2025 (25% in 1900), vs 17% for Europe (37% in 1900) and 26% in East Asia (14% in 1900). Generally speaking, the share of NAOC and Europe in world GDP has always been substantially smaller if we use PPPs rather than MERs (market exchange rates). **Sources and series:** see wid.world

Fig. 2b. Per Capita GDP by World Region, 1800-2025



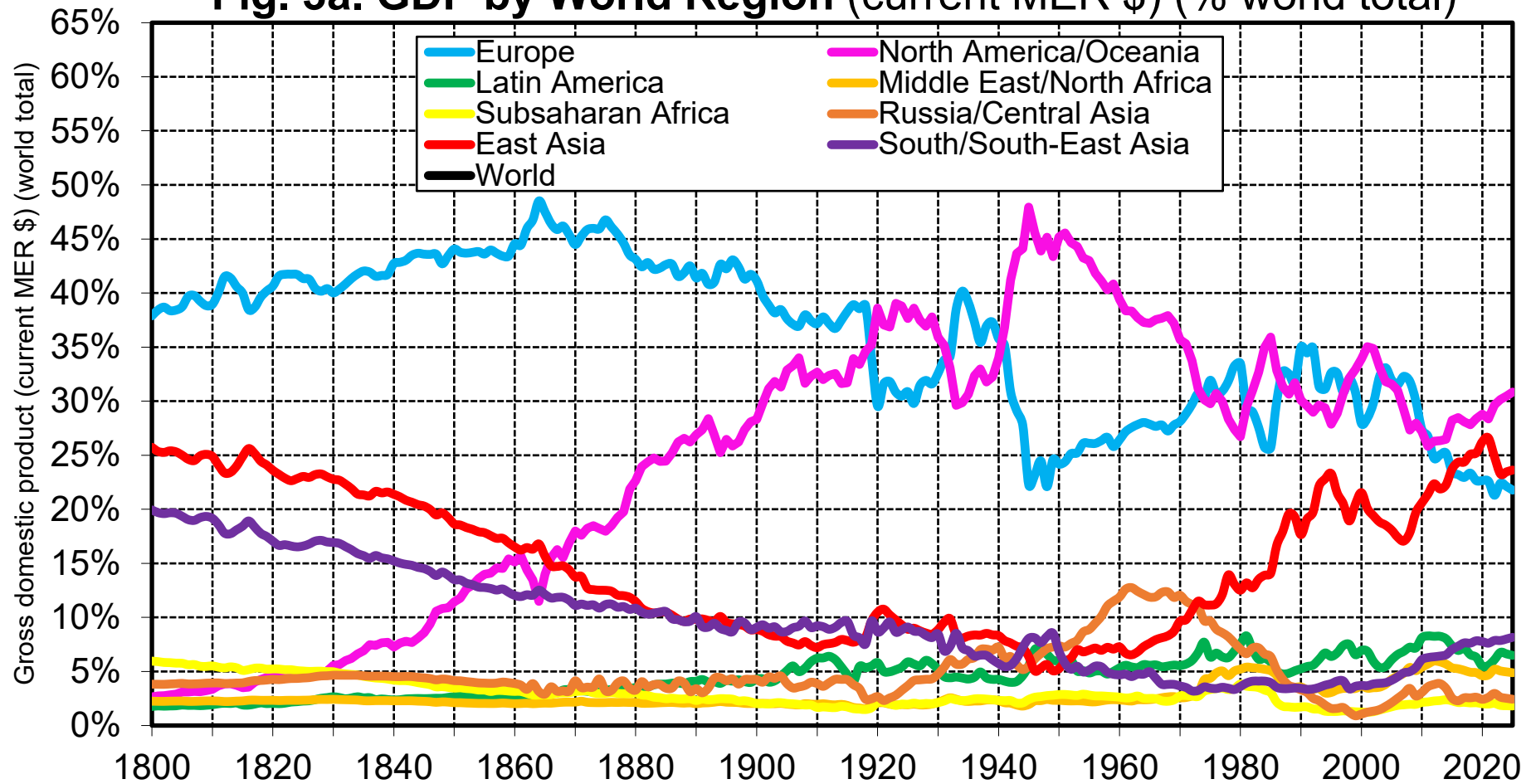
Interpretation. Expressed in 2025 PPP €, annual per capita gross domestic product (GDP) rose from about 900€ in 1800 to almost 16 000€ in 2025 at the global level. I.e. it was multiplied by about 18, which corresponds to average annual real growth rate of 1,3% per year, with large variations over time and across regions. **Sources and series:** see wid.world

Fig. 2c. Per Capita GDP by World Region, 1800-2025



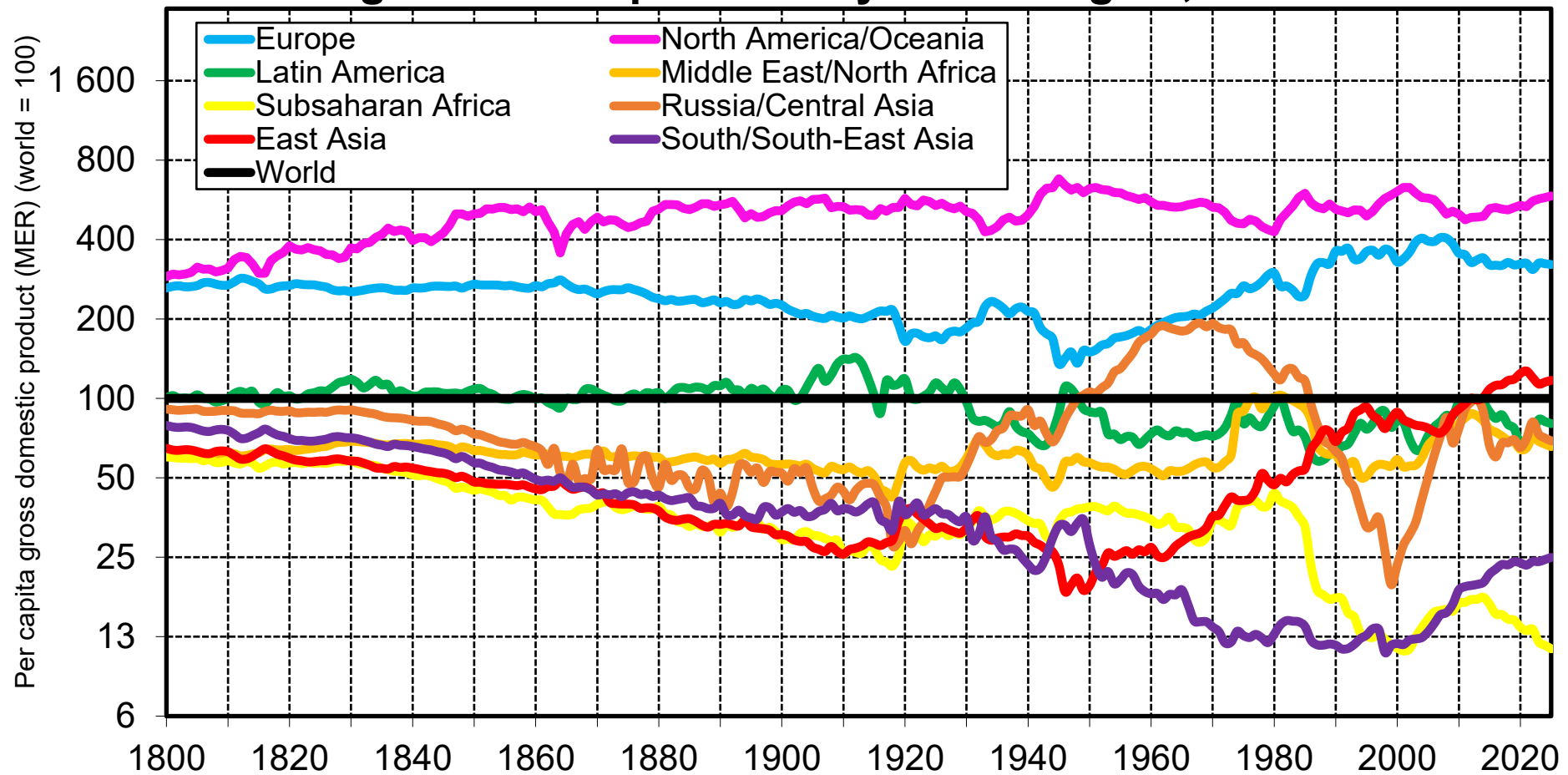
Interpretation. Per capita GDP gaps have widened during the 1800-1914 period and have started to catch up in Russia/Central Asia since 1920 and in East Asia and South/South-East Asia since 1950-1960. **Sources and series:** see wid.world

Fig. 3a. GDP by World Region (current MER \$) (% world total)



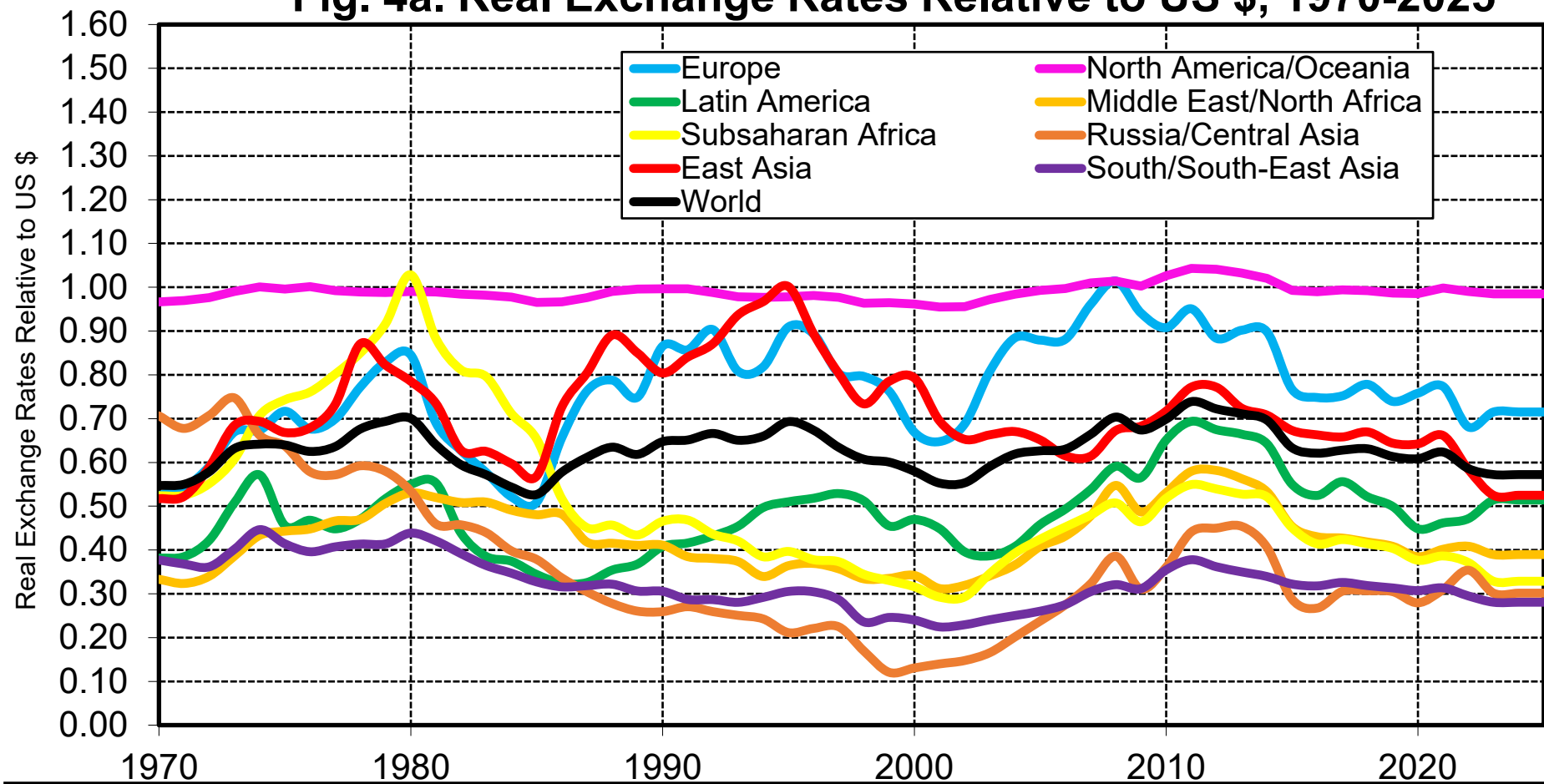
Interpretation. Using current MER \$ (market exchange rates), North America/Oceania represents about 30% of world GDP in 2025 (about the same level as in 1900), vs 23% for Europe (41% in 1900) and 24% in East Asia (8% in 1900). **Sources and series:** see wid.world

Fig. 3b. Per Capita GDP by World Region, 1800-2025



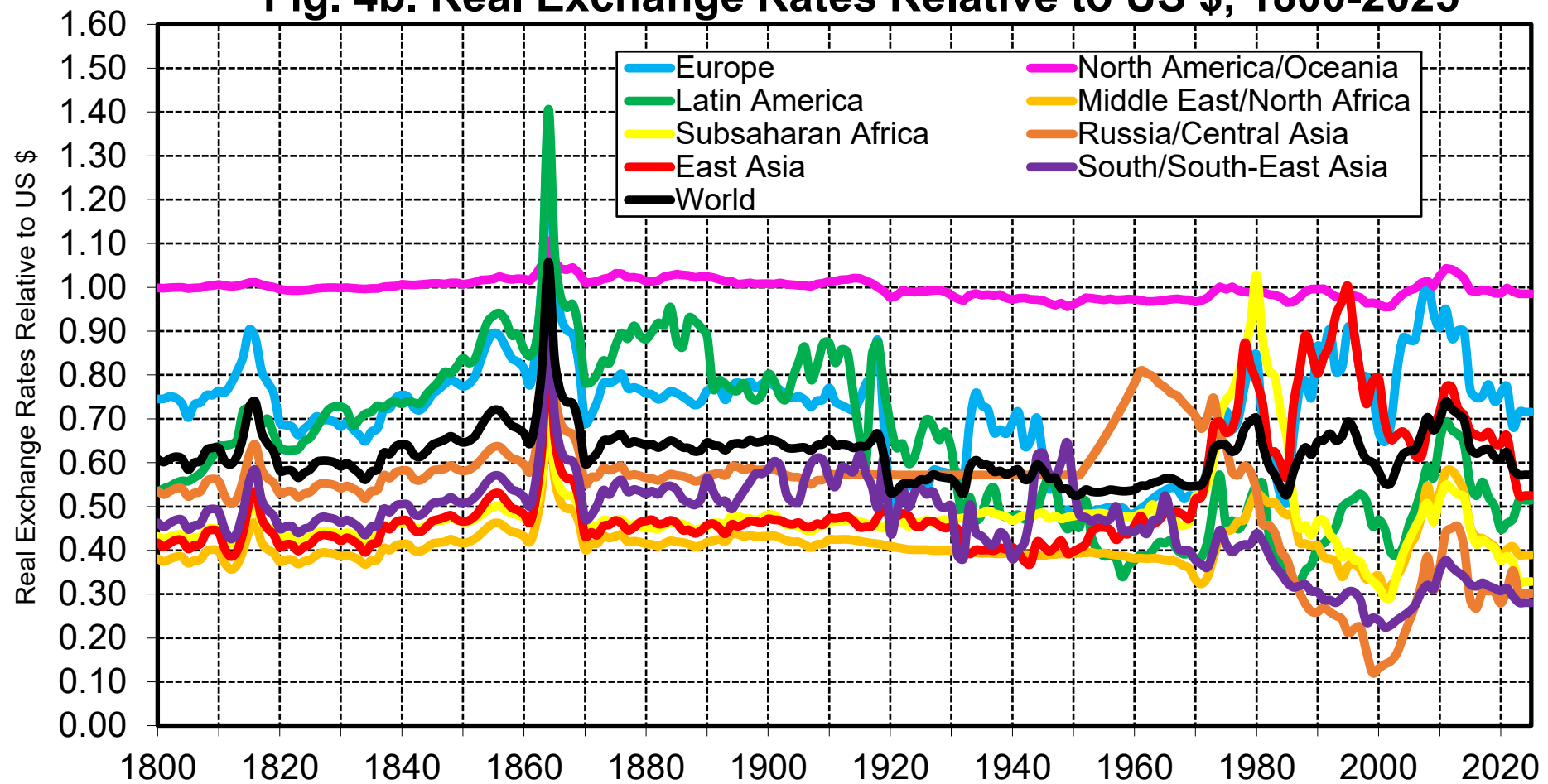
Interpretation. Per capita GDP gaps have always been larger if we use MERs estimates (market exchange rates) rather than PPP estimates (purchasing power parities). **Sources and series:** see wid.world

Fig. 4a. Real Exchange Rates Relative to US \$, 1970-2025



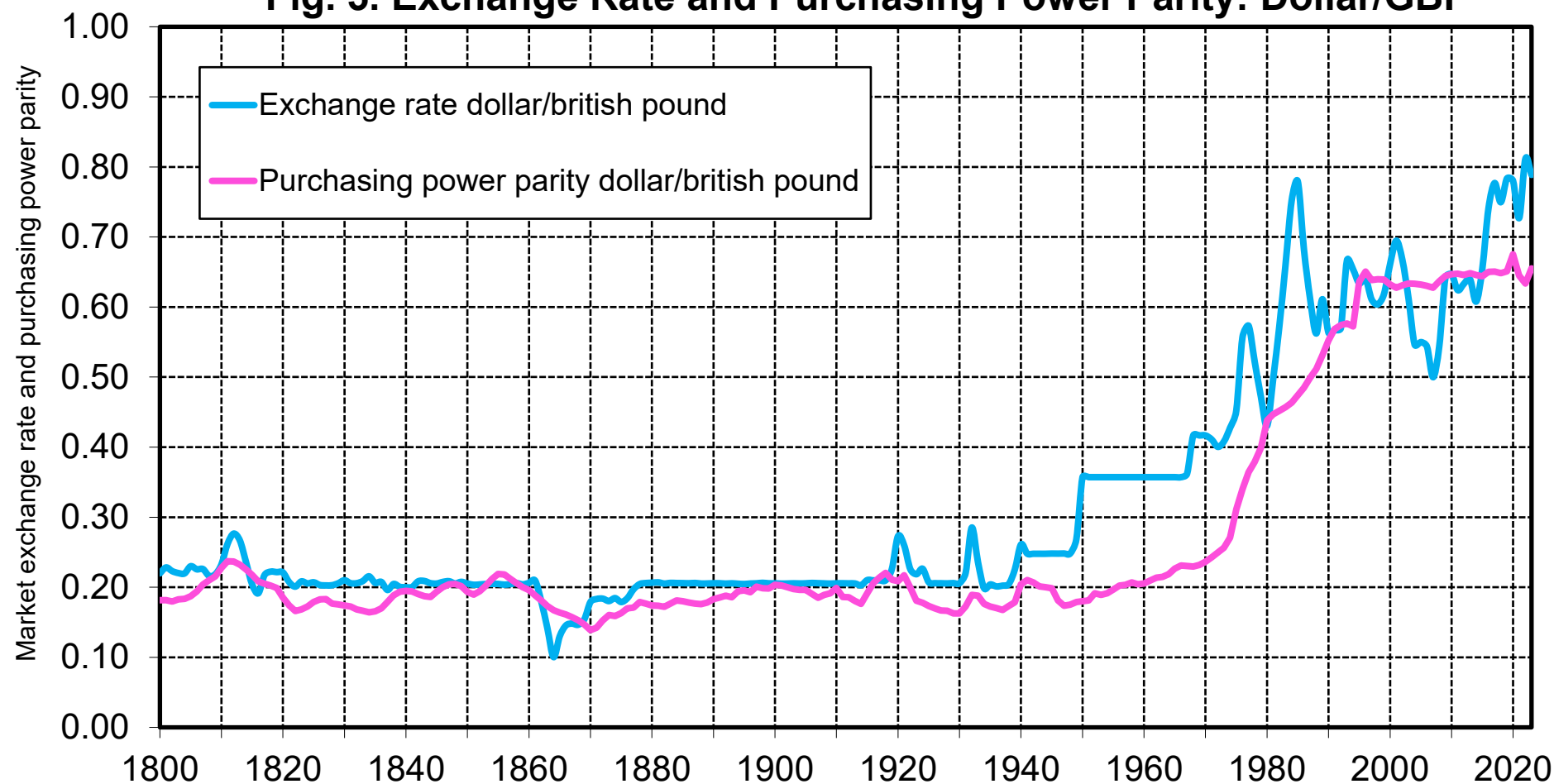
Interpretation. Real exchange rates relative to US \$ have generally been less than 1, and as low as 0.3-0.4 on average for countries in Subsaharan Africa or South & South-East Asia. I.e. if they were trading at PPP (purchasing power parity) rather than MER (market exchange rate) they would get about 3 times as much value for their exports. **Note.** Real exchange rates relative to US \$ are defined as the ratio between GDP using MER with US \$ and GDP using PPP. RERs below 1 mean that domestic currency should appreciate (and/or US \$ dollar should depreciate) in order to restore price parity. Since the 1970s-1980s, prices are compared using ICP surveys (here we use the latest one: 2021). **Sources and series:** see wid.world

Fig. 4b. Real Exchange Rates Relative to US \$, 1800-2025



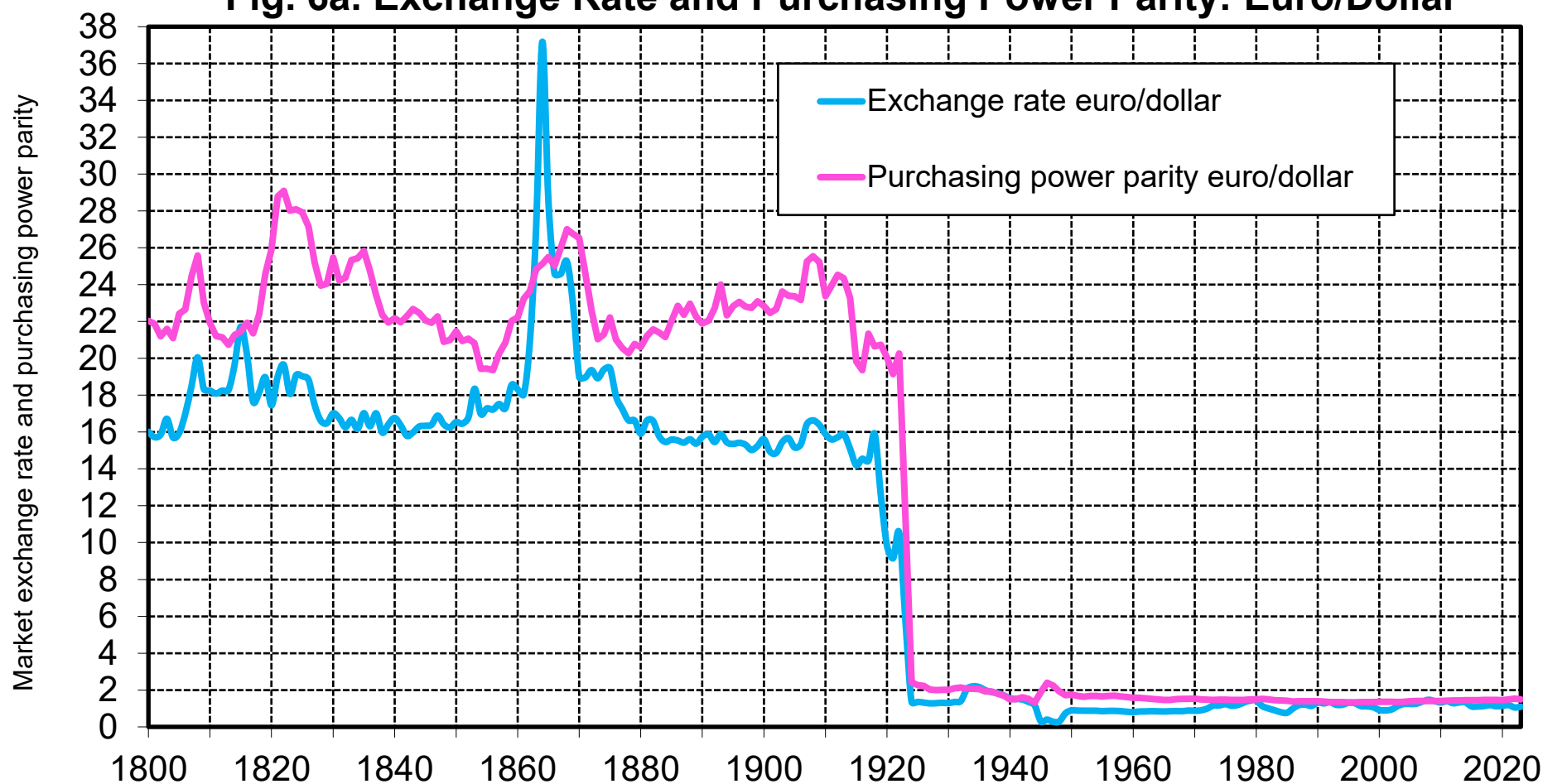
Interpretation. Real exchange rates relative to US \$ have generally been less than 1, except in the 1860s during US Civil War (\$ depreciation), and to a lesser extent in the 1990s (high yen and Japanese prices). **Note.** Real exchange rates relative to US \$ are defined as the ratio between GDP using MER (market exchange rate) with US \$ and GDP using PPP (purchasing power parity). RERs below 1 mean that domestic currency should appreciate (and/or US \$ dollar should depreciate) in order to restore price parity. Since the 1970s-1980s, prices are compared using ICP surveys (here we use the latest one 2021). Before the 1950s available national price indexes are much less comprehensive than recent indexes and many of our GDP series are expressed in US \$. **Sources and series:** see wid.world

Fig. 5. Exchange Rate and Purchasing Power Parity: Dollar/GBP



Interpretation. During the 1800-1914 period the US dollar was worth about 0.2 British pound (about 5\$ per £). The British pound lost value relative to USD over the 1914-1980 period and the US dollar is worth about 0.8 British pound in 2025 (but only about 0.65 British pound in purchasing power parity, meaning that US price levels are currently significantly larger than British prices, or to put it differently that the USD is overvalued relative to GBP). Generally speaking, market exchange rates and purchasing power parities have been relatively close to each other over the 1800-2025 period, except in post-WW2 period, when USD was very highly valued relative to GBP. **Sources and series:** see wid.world

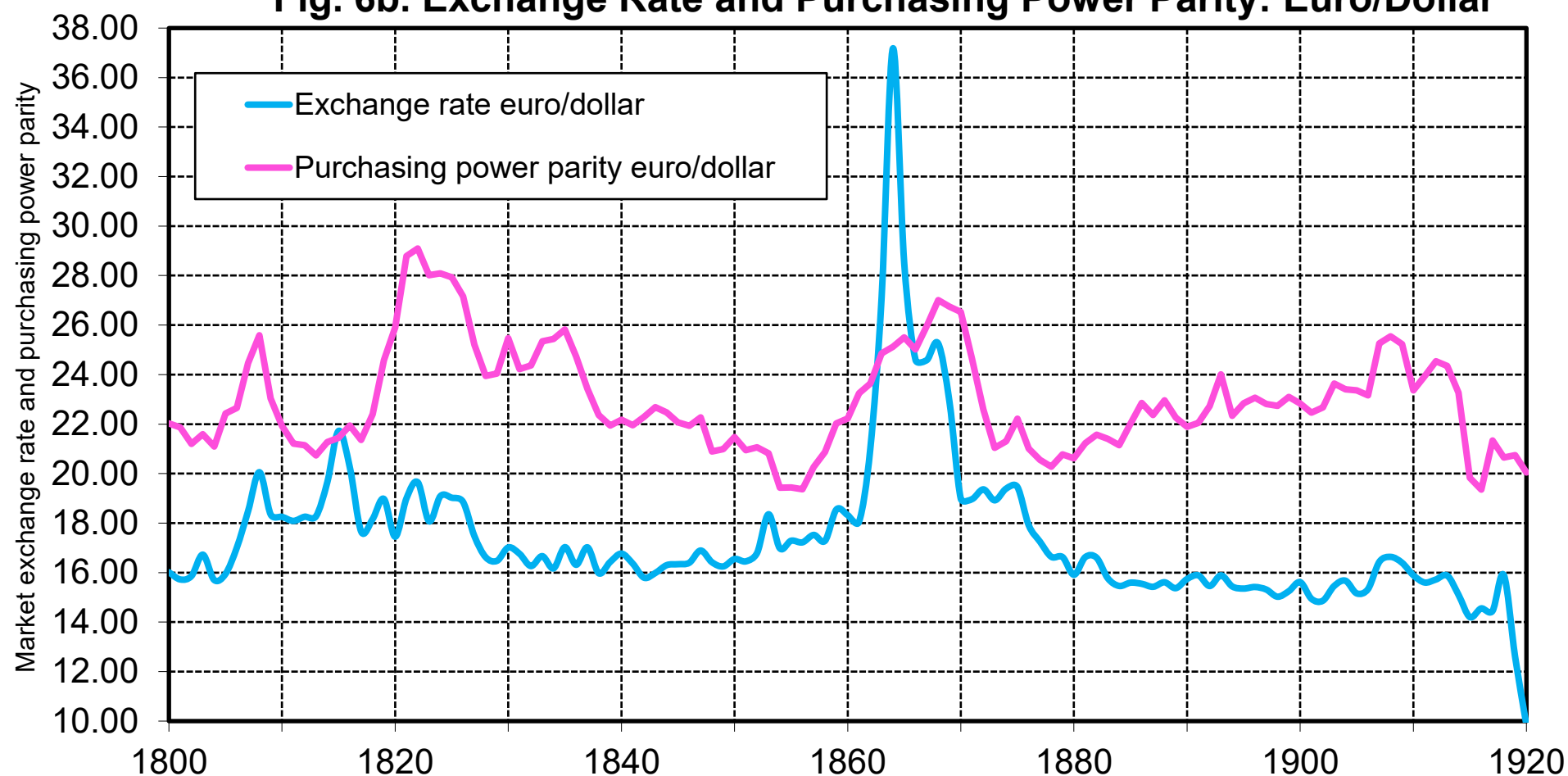
Fig. 6a. Exchange Rate and Purchasing Power Parity: Euro/Dollar



Interpretation. We define pre-1999 euro as the GDP-weighted average currency basket between DE, FR, IT, ES and NL. With this definition, we find that the exchange rate euro/dollar has been relatively stable over 1800-1914 period and 1925-2025 period, with a huge fall between 1914 and 1925 due to the fall of European currencies (especially DM). Over the 1800-2025, the purchasing power parity has generally been somewhat higher than the market exchange rate, reflecting higher prices in the US (and/or overvalued dollar relative to European currencies).

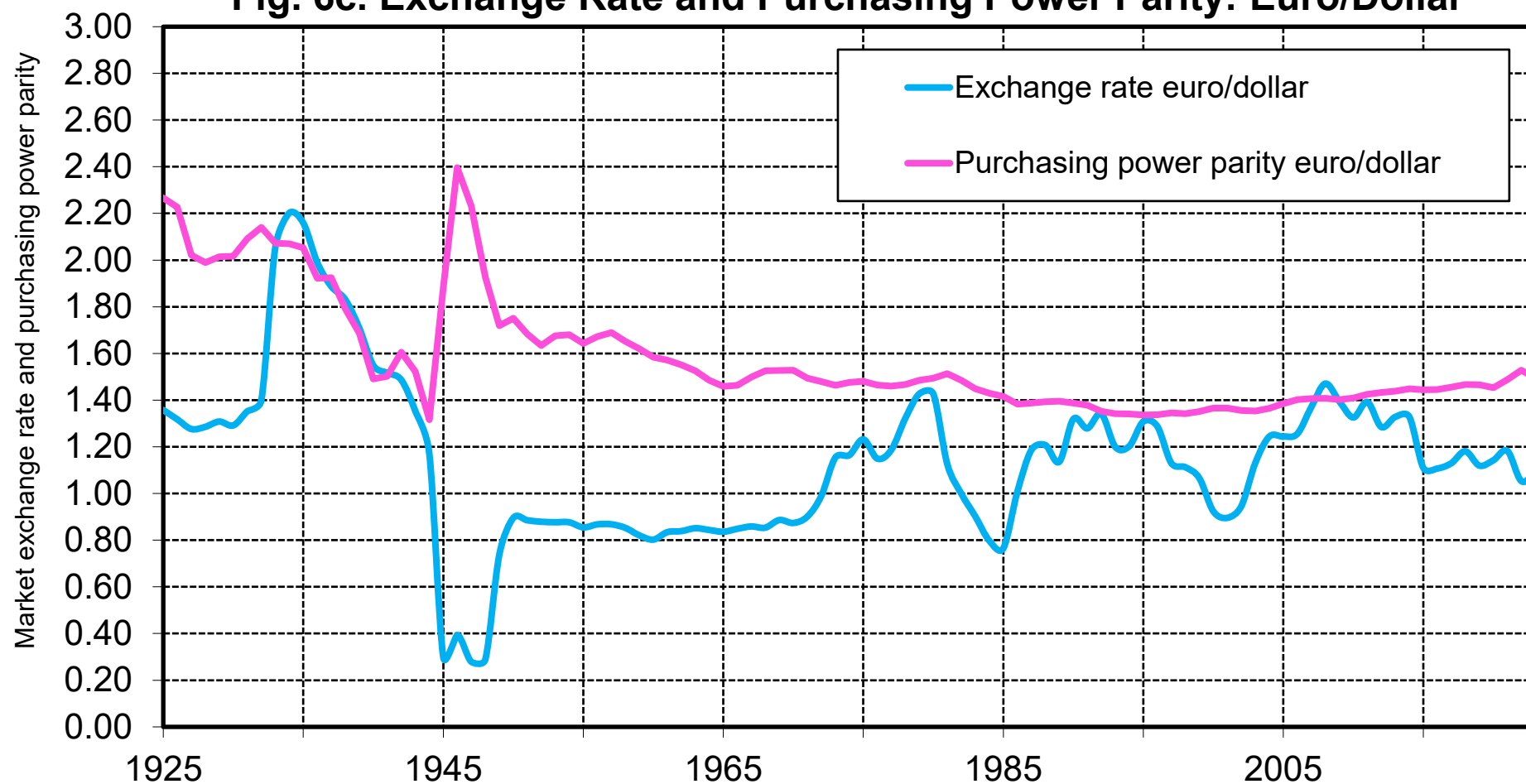
Sources and series: see wid.world

Fig. 6b. Exchange Rate and Purchasing Power Parity: Euro/Dollar



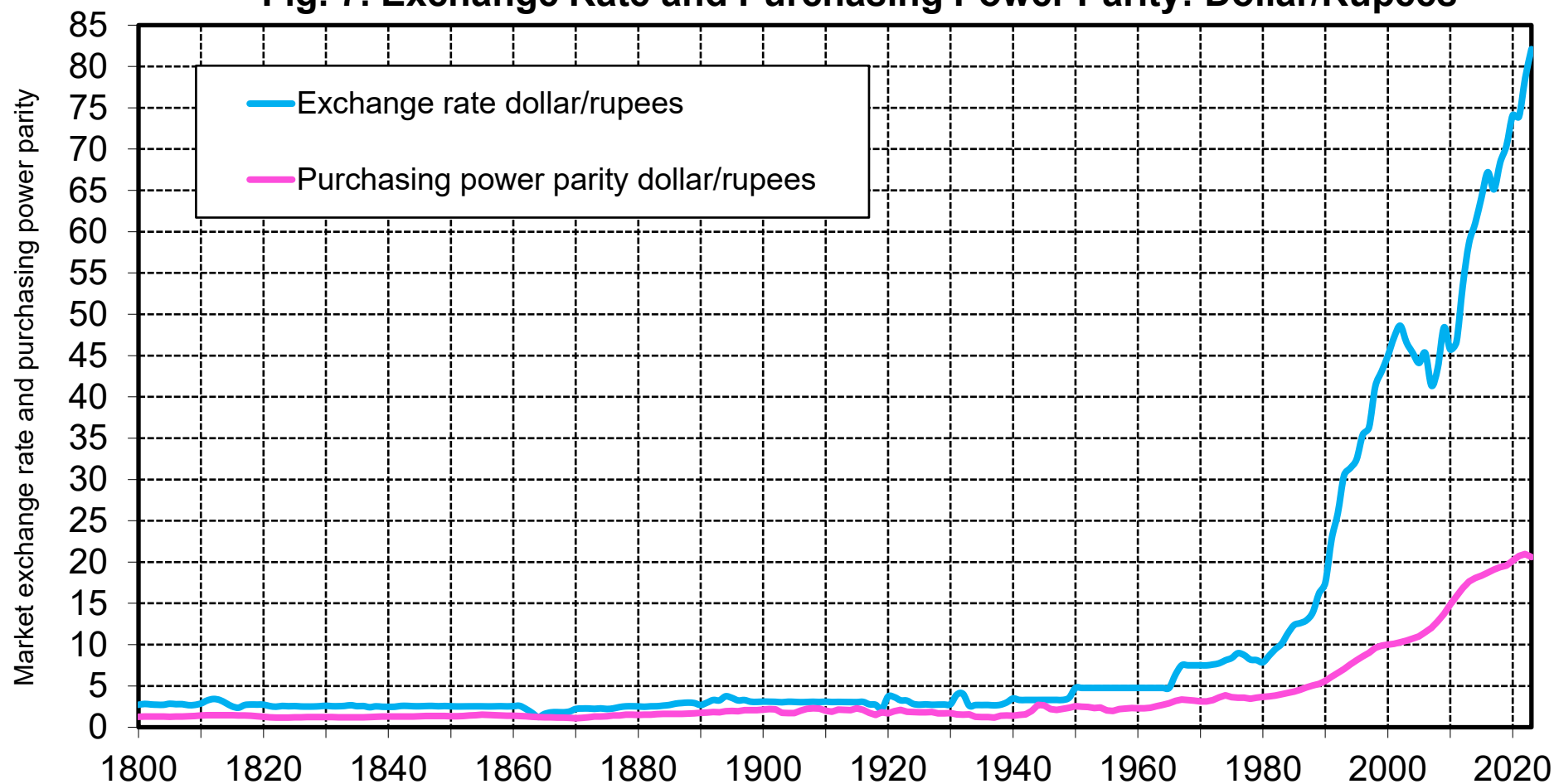
Interpretation. We define pre-1999 euro as the GDP-weighted average currency basket between DE, FR, IT, ES and NL. With this definition, we find that the exchange rate euro/dollar has been relatively stable over 1800-1914 period (with a quasi-fixed parity around 4-5 DM or FF per USD, i.e. about 20 DM or FF per GBP), except during the US Civil war (large USD depreciation). Over the 1800-1914 period, the purchasing power parity euro/dollar has generally been somewhat higher than the market exchange rate, reflecting somewhat higher prices in the US (and/or overvalued dollar relative to European currencies), except again during US Civil war. **Sources and series:** see wid.world

Fig. 6c. Exchange Rate and Purchasing Power Parity: Euro/Dollar



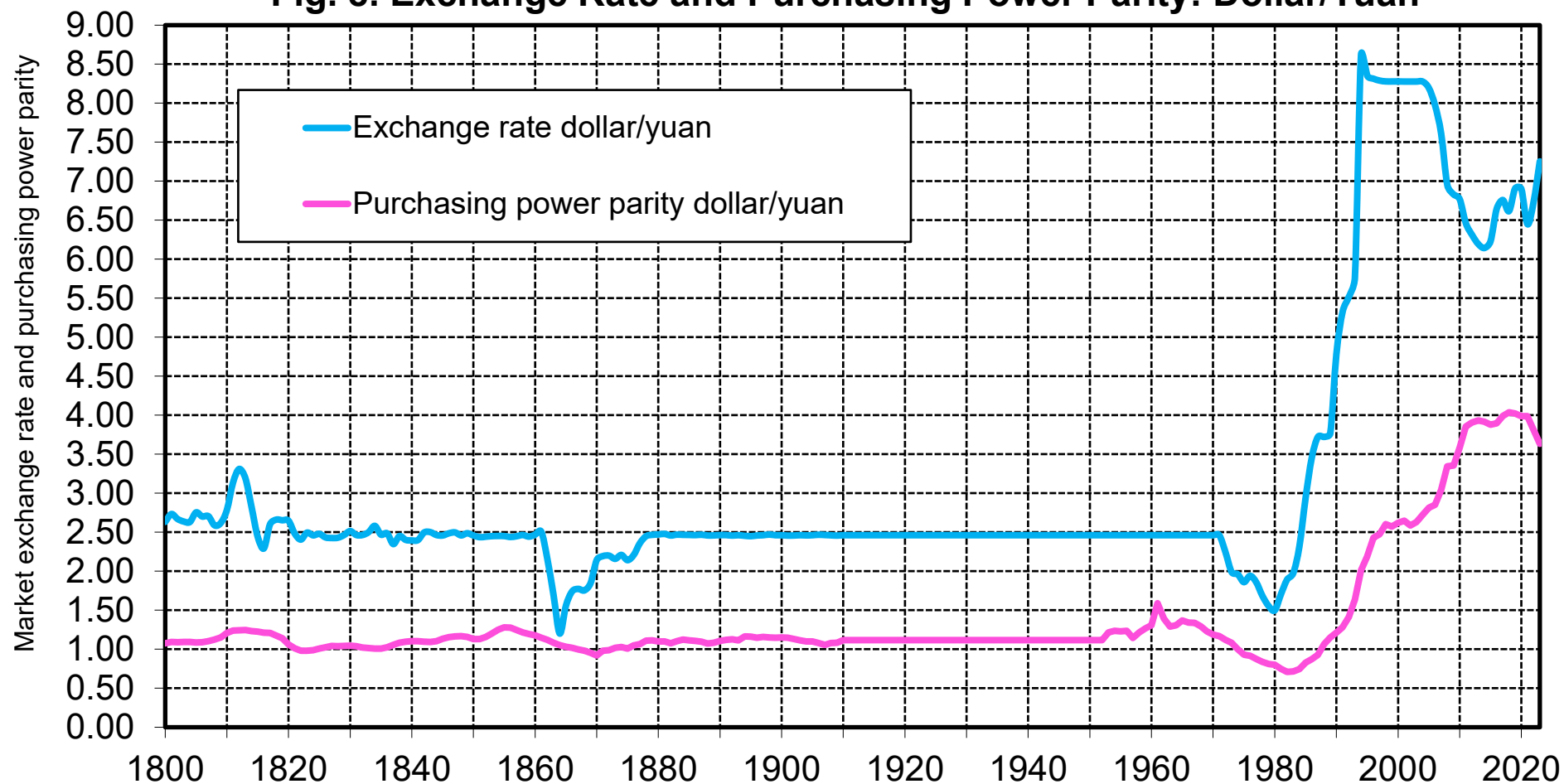
Interpretation. We define pre-1999 euro as the GDP-weighted average currency basket between DE, FR, IT, ES and NL. With this definition, we find that the exchange rate euro/dollar has been relatively stable over 1945-2025 period (with a small appreciation over time driven by the DM). In 2025, the purchasing power parity is about 1.5 dollar per euro, vs about 1.1 dollar per euro in market exchange rate, reflecting higher prices in the US (and/or overvalued dollar relative to euro). The gap between PPP and MER was a lot larger in the 1945-1975 period, reflecting much higher US prices (and/or overvalued dollar and very weak European currencies). **Sources and series:** see wid.world

Fig. 7. Exchange Rate and Purchasing Power Parity: Dollar/Rupees



Interpretation. In 2025, the dollar is worth 82 rupees on market exchange rates but less than 21 rupees in purchasing power parity, reflecting much higher price levels in the US than in India (and/or the overvaluation of dollar relative to rupees). There has always a gap between MER and PPP over the 1800-2025 period, but the gap was more moderate between 1800 and 1970 (with a gap of about 1 to 1.5 or 1 to 2) and has grown substantially since 1970-1980 (with a gap of about 1 to 4 in 2025). **Sources and series:** see wid.world

Fig. 8. Exchange Rate and Purchasing Power Parity: Dollar/Yuan



Interpretation. In 2025, the dollar is worth 7 yuans on market exchange rates and about 3.5-4 yuans in purchasing power parity, reflecting higher price levels in the US than in China (and/or the overvaluation of dollar relative to yuans). There has always a gap between MER and PPP over 1800-2025 period but this gap grew to particularly high levels around 1990-2010 before reducing to lower levels. **Note.** Due to missing data the yuan was conventionally assumed to be pegged to GBP and USD over the 1800-1970 period. **Sources and series:** see wid.world