

Special Issue on Formerly Socialist Economies

Analysing socialist economies: the first two decades of wiiw publications

A brand new wiiw dataset on the former socialist countries

Why did socialism collapse? Insights from our new COMECON Dataset



Special Issue on Formerly Socialist Economies

Analysing socialist economies: the first two decades of wiiw publications

A brand new wiiw dataset on the former socialist countries

Why did socialism collapse? Insights from our new COMECON Dataset

BRANIMIR JOVANOVIĆ
ARTEM KOCHNEV
MANUEL NEUBAUER
MONIKA SCHWARZHAPPEL

CONTENTS

Analysing socialist economies: the first two decades of wiiw publications	7
A brand new wiiw dataset on the former socialist countries	11
Why did socialism collapse? Insights from our new COMECON Dataset	19
Monthly and quarterly statistics for Central, East and Southeast Europe.....	29
Index of subjects – December 2023 to December 2024	54

Analysing socialist economies: the first two decades of wiiw publications

BY MANUEL NEUBAUER¹

*As part of its COMECON project, wiiw has digitised hundreds of its publications – more than 45,000 pages in all. As these are now publicly accessible on <https://comecon.wiiw.ac.at/>, this article serves as a short introduction to wiiw's early publications, in particular those examining the socialist economies up until 1991. Two of our oldest and most important publications have been providing wiiw's members with up-to-date research ever since those early days: *Research Reports* and *Monthly Reports*. Both may serve today as a fascinating survey of developing Western perceptions of the socialist system.*

THE EARLY YEARS OF WIIW

By the time the Soviet Union collapsed in December 1991, the Vienna Institute for International Economic Studies (wiiw) had been ceaselessly analysing Eastern Europe, the Soviet Union and Yugoslavia for nearly two decades. Unsurprisingly, this activity resulted in a considerable output – not only books and compendia, but also regular publications. By late 1991, the regular publication series alone amounted to more than 450 volumes: almost 180 Research Reports, 155 Monthly Reports and more than 130 issues of the Reprint Series. And these figures do not even take into account the plethora of studies commissioned by private customers.

The early history of wiiw has been extensively discussed elsewhere (Mayrhofer, 2018);² but as these publications are available only in German, a few words are required to provide the necessary context. Having previously been a department of the Austrian Institute of Economic Research (*Österreichisches Institut für Wirtschaftsforschung* – WIFO), wiiw came into being as a separate entity in January 1973, initially as the Vienna Institute for Comparisons of Economies and Systems (*Wiener Institut für Wirtschafts- und Systemvergleiche*) – thereby implying a political level of comparison as well. The driving force behind its creation was Franz Nemschak, the director of WIFO, who had been advocating for a specialised centre on East-West relations in Vienna since the 1960s. When, in 1968, leading Czech and Polish economists had to flee their home countries because of the Prague Spring or antisemitic repression, Nemschak welcomed them to Vienna; and in 1969, having secured financial support from the Ford Foundation, he finally created the new Department for International Economic Comparisons (*Abteilung Internationale Wirtschaftsvergleiche*) at WIFO – wiiw's predecessor.

¹ Manuel Neubauer is currently coordinator at the Research Centre for the History of Transformations (RECET, University of Vienna). At wiiw, he was responsible for the digitisation of the publications discussed here.

² For the early years, see wiiw *Reprint Series*, 35 (1978), where wiiw's founder and first director, Franz Nemschak, describes the founding process. See also: Stankovsky and Gazzari (1973).

WIIW'S PUBLICATIONS DURING ITS FIRST TWO DECADES

The first publications of the soon-to-be wiiw were issued by this department of WIFO, and therefore pre-date wiiw's establishment as a separate institute. Volumes I to III of *Studien über Wirtschafts- und Systemvergleiche* – the first books in wiiw's long list of publications³ – were published as early as 1971. The first issues of the Research Reports, one of the major publication series discussed here, were printed in the summer of 1972, while wiiw was still operating within the framework of WIFO. It took until Research Report 8 (May 1973) for wiiw finally to be listed as the main publishing entity; and WIFO continued to be mentioned on the title page until 1990 – probably because wiiw would remain at the same address as WIFO (at Arsenal) for years to come.

During its first two decades, wiiw published the following series.

Research Reports (since 1972)

The Research Reports, wiiw's oldest publication series, are still being produced: as of December 2024, 477 issues have seen the light of day. Their purpose has been to provide wiiw's researchers with an opportunity to publish original research that would not otherwise appear as (part of) a book. The Research Reports' topics include deep dives into certain aspects (for example, technology, inflation, unemployment, agriculture) or countries (in some cases spanning several decades), as well as discussions of a more theoretical or mathematical nature. The very first issue, for example, dealt with the question of how to calculate the GDP of Eastern European economies using Western methodology (Askanas, 1972). Until 1974, the Research Reports were published exclusively in German (and were therefore entitled *Forschungsberichte*). Subsequently, until 1991, the ratio of English to German was approximately 50:50; thereafter, the German-language reports disappeared almost completely, with only a very few exceptions. In 2000, the introduction of a parallel series entitled *Forschungsarbeiten in deutscher Sprache* would finally separate these two formally.

Monthly Reports (since March 1978)

The Monthly Reports, initially called *Mitgliederinformation* ('member information'), are one of the oldest ongoing publications of wiiw. The first issue, which discussed the probability of the Soviet Union fulfilling its plan goals for 1980, appeared in March 1978 (N.N., 1978). From the outset, they were intended as an exclusive newsletter for paying members, as a means of keeping them up to date by providing insights into current developments, analyses of the plans of the socialist states, and forecasts of economic growth and other economic indicators in the CMEA area. Though to this day wiiw's members get privileged access to Monthly Reports, the reports are nowadays publicly accessible after an embargo period of six months.

The first *Mitgliederinformationen* were quite short, with only a few pages and one article per issue. The first report to feature more than one contribution appeared in January 1979, but it would take until early 1981 for two or more articles to be the rule rather than the exception. Likewise, the first English-language issue appeared in February 1979; in the following years, the ratio of German- to English-language contributions was about 50:50, before the proportion gradually shifted towards the majority being in English. The last German-language article appeared in January 1986, although the German title *Mitgliederinformation* was retained until 1994. In most years, the summer months were covered by a

³ In 2014, the list of publications extended to more than 80 pages.

double issue (mostly August/September); so up until 1989, there were usually 11 Monthly Reports a year (this practice was reintroduced in 1994). From 1981, they served as a way of announcing members' seminars and of publishing summaries of the papers presented at these events – or even the papers themselves.

A monthly statistical overview, entitled 'Monthly data on the economic situation', became a standard feature of the Monthly Reports in late 1990 – first of all for Hungary, Poland and Yugoslavia. Czechoslovakia was added in early 1991 and Romania in April of the same year. A year later, Yugoslavia was dropped in the wake of its dissolution, and Slovenia – the first state to secede from Yugoslavia – was added instead, towards the end of 1992.

Reprint Series (1973-1998)

wiiw created the Reprint Series to provide its staff and regular collaborators with the opportunity to republish articles that had previously been printed elsewhere – mostly in other journals or newspapers. The republication did not necessarily align with the original publication dates, as No. 1 could not have been published prior to March 1973, while the second issue reproduces an article from 1972. As with the other publication series, the reprint series was bilingual from the start, though the great majority of issues remained in German; the series was eventually wound up in May 1998 after 170 volumes (137 of them had been published by the end of 1991). A huge percentage of the Reprint Series content had previously been printed in WIFO publications; WIFO monthly reports feature prominently among these.

Current Analyses and Country Profiles (1991-2006)

In 1991, a new publication series called 'Current Analyses and Country Profiles' was launched (later to be shortened to simply 'Country Profiles'). This was a timely addition to wiiw's regular publications in a period of massive political and economic upheaval – as was aptly showcased in the titles of the first two volumes: while the first issue (October 1991) discussed 'recession and transformation' in 'Eastern Europe and the Soviet Union' (Hunya et al., 1991), the second volume (May 1992) was already entitled 'Russian Federation: Economic situation in early 1992 and Western financial risks' (Havlik, 1992). The third volume analysed the possible effects of the coming separation of Czechoslovakia's two constituent parts (Lukas, 1992), while the fifth and seventh issues summarised the economic situation in the newly formed states of Ukraine (Boss, 1993) and Slovenia (Štiblar and Vidovic, 1993), respectively. In 2006, the publication series ceased after 23 issues.

UNIQUE SOURCE MATERIAL FOR ECONOMISTS AND HISTORIANS

Even a cursory glance at the titles published in the first two decades of wiiw's existence illustrates the broad scope of research conducted at wiiw. Topics include the US embargo on the Soviet Union; the Polish crisis of 1981; Gorbachev's first five-year plan; the effects of *perestroika*; the 'shock therapy' in Poland; the transformation of Romanian markets; the dissolution of Czechoslovakia; the profound crisis in Russia following the collapse of the Soviet Union and the attempted coup of 1991; and German unification. All these major economic developments – gradual changes, as well as spontaneous ruptures – were duly covered by the staff of wiiw. This made its publications a valuable source not only for the study of Eastern Europe in the 1970s, 1980s and 1990s, but also – and especially – for East-West interactions during that period, and Western perceptions of Eastern European economies and policies. In the final years leading up to 1991, these publications provided a unique glimpse of the slow-motion

collapse of the Eastern bloc, the Soviet Union (the collapse of the Soviet Union was in fact predicted in February 1991; Havlik, 1991) and subsequently Yugoslavia. Immediately afterwards, the economies of the emerging post-Soviet and post-Yugoslav states were analysed in detail, along with other Eastern European economies.

The early publications of wiiw, now publicly available to a broad audience, provide a unique source for economists and historians alike, and are an invaluable asset when it comes to contextualising and explaining the current state of the former CMEA economies, post-Soviet states and the Balkans.

REFERENCES

- Askanas, B. (1972), Zur Berechnung des Brutto-Nationalproduktes in Osteuropa nach westlichen Methoden am Beispiel Polens. *wiiw Forschungsberichte*, 1.
- Boss, H. (1993). Ukraine's first eighteen months of economic statehood. *Current Analyses and Country Profiles*, 5.
- Havlik, P. (1991). Soviet Union: Economy heading for collapse. *wiiw Mitgliederinformation*, 1991/2, 3-11.
- Havlik, P. (1992). Russian Federation: Economic situation in early 1992 and Western financial risks. *Current Analyses and Country Profiles*, 2.
- Hunya, G., Gabrisch, H., Grosser, I., Havlik, P., Lukas, Z., Richter, S. & Vidovic, H. (1991). Recession and transformation: The economic situation in Central and Eastern Europe and the Soviet Union in the first half of 1991 and outlook for the end of the year. *Current Analyses and Country Profiles*, 1.
- Lukas, Z. (1992). CSFR: Standing of both republics and effects of a separation. *Current Analyses and Country Profiles*, 3.
- Mayrhofer, P. (2018). Zur Gründungsgeschichte des Wiener Instituts für Internationale Wirtschaftsvergleiche, wiiw publication.
- N.N. (1978). Sowjetische Planziele bis 1980 kaum erreichbar. *wiiw Mitgliederinformation*, 1978/1.
- Nemschak, F. (1978). Das Wiener Institut für Internationale Wirtschaftsvergleiche. *Reprint Series*, 35.
- Stankovsky, J. & Gazzari, I. (1973). Ostwirtschaftsforschung in Österreich, in: *Wirtschaftsforschung in Österreich. Eine Standortbestimmung*. Vienna: WIFO, pp. 235-245.
- Štiblar, F. & Vidovic, H. (1993). Slovenia: A country profile with special emphasis on Slovenia's external position. *Current Analyses and Country Profiles*, 7.

A brand new wiiw dataset on the former socialist countries

BY ARTEM KOCHNEV AND MONIKA SCHWARZHAPPEL

wiiw has compiled an innovative dataset on the nine former socialist countries: Albania, Bulgaria, Czechoslovakia, the German Democratic Republic, Hungary, Poland, Romania, the Soviet Union and Yugoslavia. The dataset includes a total of 8,347 economic and social indicators, organised into 11 chapters and spanning the period from 1944 to 1993. Thanks to the significant effort put into data harmonisation, it contributes to a more comprehensive understanding of twentieth-century economic history.

This article introduces a comprehensive historical dataset of economic time series for the member countries of the former Council for Mutual Economic Assistance (COMECON or CMEA), as well as Yugoslavia and Albania, from 1944 to 1993.¹ It provides an explanation of the dataset's structure, identifies gaps in the data, describes harmonisation efforts, and provides an overview of the accounting methodologies adopted by the COMECON countries and their differences over this period. The CMEA existed from 1949 to 1991 as an intergovernmental body that coordinated trade and economic planning across the former socialist economies of Bulgaria, Czechoslovakia (ČSSR), the German Democratic Republic (GDR), Hungary, Poland, Romania and the Soviet Union (USSR). Additionally, the dataset includes Yugoslavia and Albania, which were never full COMECON members. The wiiw COMECON Dataset thus covers a total of nine countries.² All of the data are directly digitised from the statistical yearbooks of the former socialist economies: wiiw had a very well organised exchange of publications, via the Academy of Sciences, between Austria and the respective CMEA countries.

As part of the project, a new dataset for Albania was created alongside the existing data for eight socialist countries. Since Albania's statistical yearbooks were not available in print, a team member photographed them in Tirana. These images were converted into Optical Character Recognition (OCR)-capable PDFs, enabling the creation of indicators comparable to those of the CMEA countries. After harmonising the COMECON Dataset, the Albanian data were compiled accordingly. For this reason, Albania is not included in any of the following analyses in the tables and charts.

The dataset covers a wide range of economic indicators – over 8,300 unique time series in total (including Albania) – offering a unique resource for analysing economic trends, structural changes and economic performance within the socialist bloc (a valuable contribution and an important basis for economic historians). It could potentially lead to a reassessment of previous conclusions about economic growth, structural change and living standards under socialism (Bukowski and Novokmet, 2021; Gaidar, 2010; Kukić, 2018), and thereby contribute to a more comprehensive understanding of twentieth-century economic history. Furthermore, the dataset's coverage of the so-called 'transition period' (1989-1993) offers valuable insights into the immediate economic effects of the shift from

¹ This project work was funded by the Anniversary Fund of the Oesterreichische Nationalbank.

² <https://comecon.wiiw.ac.at/>

centrally planned to market economies. This could contribute to ongoing debates about the speed and nature of the economic transitions (Lavigne, 1999).

SOURCES OF THE DATA

The two most important primary sources forming the core of the wiiw COMECON Dataset are the statistical yearbooks of the national statistical agencies/institutes (in the respective national language, as English-language yearbooks were rare) and the CMEA statistical yearbooks (in Russian). These sources complement each other: the CMEA yearbooks are an excellent companion to the national statistical yearbooks, as they provide a wide range of topics on all seven CMEA countries (there are no data for Yugoslavia and Albania), and sometimes more information on methodological issues is given than is available in the national yearbooks. It is recognisable in the database under the parameter 'classification', e.g. by CMEA sector or CMEA product.

National statistical yearbooks were produced by the national agencies independently of one another. Although all countries used the Material Product System (MPS) as a basis, their economic models and scope of centralised planning varied. These differences are discernible in the national accounting, as the depth and coverage of individual industries and their definitions varied from country to country. By contrast, CMEA yearbooks adopted harmonised definitions across the countries. However, differences in ownership structures and price control settings meant that strict comparability of the time series was not necessarily guaranteed: certain CMEA countries (e.g. Hungary and Poland) allowed for private property and market-like pricing in certain sectors of the economy, while others did not.

The hard-copy versions of the national and CMEA statistical yearbooks were augmented by data reported by central banks and international statistical organisations. The diversity of sources required significant harmonisation efforts. This is largely due to the different methodological bases across the primary sources, as data produced by the international organisations and researchers living in market economies often stayed within the framework of the System of National Accounts (SNA), whereas the command economies followed the MPS. However, even when sources shared the same methodological basis, the scope and definitions of the time series reported varied markedly from country to country, and sometimes within a single country itself.

DIGITISATION PROCESS

The process consisted of four stages: data transfer from the statistical yearbooks to a standardised physical medium (so-called 'cards'); data transfer to a digital storage medium; data harmonisation; and data validation. The first two stages took place largely during the production of the original wiiw yearbooks – called *COMECON Data* – in the 1970s and late 1980s. The final two stages were completed between 2021 and 2024.

National statistical yearbooks formed the primary source of information. This enabled wiiw to build up a continuous series of all statistical yearbooks for the countries mentioned. At that time, dedicated staff transcribed and entered data from the statistical yearbooks onto physical spreadsheets ('cards') and provided comments on the dedicated series (all sources used are described there).

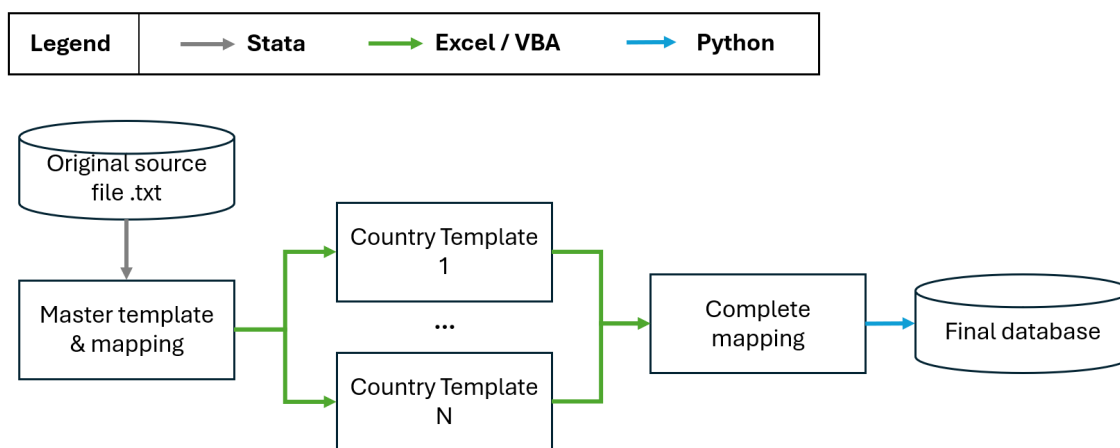
Figure 1 / An example of a physical spreadsheet used for data coding and transfer from statistical yearbooks to digital format

UdSSR		Ges. Exporte nach Ländergruppen										
		Laufende Preise										Mio. Rubel
		1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	Code
SXTTT	INSGESAMT	49 634,5	57 167,8	63 165,0	67 890,6	74 383,7	72 063,7	68 284,6	68 142,2	67 154	68 714	SXSSIN
SXYTT	Sozialistische Länder	26 903,0	31 191,5	34 136,2	37 314,0	42 106,5	44 677,3	45 623,3	44 199,7	42 282,8	42 226,7	SXSSGN
SXWTT	RGW-Länder	24 339,0	28 566,4	31 149,9	34 449,3	38 107,6	40 233,8	42 157,1	40 685,0	39 043,0	37 957,6	SXSSIN
SXOTT	Osteuropa	20 919,4	24 320,0	26 235,4	29 152,1	32 393,8	34 020,0	35 848,8	34 310,3	32 199,9	31 728,0	SXSSAN
SXITTT	Westliche Industrie Länder	15 261,9	17 244,0	18 849,0	19 652,9	21 349,4	18 581,4	13 109,2	14 185,5	14 665,6	16 390,1	SXSSIN
SXETTT	Entwicklungsländer	6 869,6	8 693,3	10 179,8	10 523,4	10 928,0	9 615,0	9 550,8	9 754,3	9 567,0	10 192,8	SXSSGN
SXWTTT	RGW-Osteuropa											
SXRTTT	Übrige soz. Länder	2 568,0	2 625,1	2 926,3	2 864,7	3 914,7	4 212,5	3 662,0	2 027	2 857,8	4 104,1	SXSSIN

Source: wiiw statistics archive.

The staff digitised the data at the Economic Computing Centre (WSR), which merged with the Austrian Institute for Economic Research (WIFO) in late 2023. A WIFO-developed interface enabled data transfer to a server, storage in a database, and the retrieval of tables and charts with mathematical transformations. These data served as the basis for the publication of the wiiw statistical yearbooks – *COMECON Data*, starting with the first edition in 1973 (in German, later in English).

Figure 2 / Data validation pipeline



Source: own elaboration.

Between 2021 and 2024, data from WSR were exported to a text file for harmonisation and validation, then organised in a master Excel workbook, mapping the original to harmonised descriptors. The validation team manually went through the country templates to correct the data points, add new labels, mark decommissioned time series and add new ones whenever it was deemed necessary. Manual revisions mainly resulted in the changes outlined in Table 1. After the data revision in the country

templates was complete, the VBA macro compiled all the country data into a single file, which was later transformed using Python script into convenient data formats.

Table 1 / Scope of the harmonisation and validation process

Action	Description
Corrections to data entries	Mislabeled or incorrectly defined data fields were corrected, such as by adjusting for incorrect units, mislabeled expenditure categories and misclassified indicators. Missing values in various datasets were identified and filled in, especially when discrepancies were noted (e.g. identification and correction of typing errors in the database or incorrect write-offs from the statistical yearbooks).
Revisions and updates to existing data	Historical data series were revised to better align them with updated industry breakdowns or economic developments. Revisions were made to classifications and hierarchies in areas such as production, investment, employment and wages to reflect a more accurate picture of the sectors. Additional fields were added to accommodate updated classifications and groupings.
Handling missing or incorrect classifications	Missing or incomplete data for certain categories (e.g. regional or commodity groups) were addressed, and discussions were initiated about how to handle classifications that did not fit into existing structures. Classification systems (e.g. for industries and sectors) were aligned with the final dataset, ensuring that all relevant data were captured.
Formatting and labelling adjustments	Formatting issues (e.g. capitalisation inconsistencies and incorrect unit symbols) were corrected across multiple files. Labels were updated for clarity, especially in cases where identical labels caused confusion when attempting to distinguish different data series.
Integration of new and missing data	New data series were incorporated, and adjustments were made to ensure that they were properly categorized and integrated into the existing datasets. Data series that were duplicated or incorrectly added were removed or replaced with correct entries.
Harmonisation	<ul style="list-style-type: none"> › Harmonisation of indices within a topic to a uniform base index (countries mostly provided different basic indices); › Harmonisation of units (e.g. recalculating billions of national currency to millions): This was only done if the size of the number allowed it, depending on the indicator and country size (e.g. Poland, Yugoslavia); › Harmonisation of the sectoral breakdown, so that each country has the same breakdown in terms of content (any deviations are shown in the 'Notes' field); › Harmonisation of all spellings (spelling mistakes, mixtures of English and German, abbreviations etc.). <p>However, the allocation of industries to productive/non-productive sectors was not changed by wiiw; the country-specific allocation (which might differ from country to country) is still shown.</p>

DATASET STRUCTURE

The final result of the digitisation process is the wiiw COMECON Dataset. The dataset is organised hierarchically – in other words, time series are reported in a way that clarifies their relationship to larger categories, in order to make it clear how each series is a subset of a broader classification. The most important components of the hierarchy are:

1. **Chapter:** The highest level, which defines the broad category under which data are grouped. All subsequent entries are subsets of this overarching category.
2. **Indicator:** A specific measurement within the chapter, further refining the focus of the data. It represents a subset of the broader chapter, providing more detailed information.
3. **Classification Type:** This layer reflects the principle or methodology according to which the data are broken down.

4. **Industry Levels 1 to 5:** The dataset may break industries down into multiple levels, progressing from a broad classification to more detailed subcategories. Each industry level is a subset of the preceding one, allowing users to drill down into increasingly specific activities.
5. **Partner:** For time series that compare countries or regions (e.g. in the chapter 'Foreign trade'), this layer provides additional granularity, showing bilateral trade flows between the country of origin and other countries, regions or the rest of the world.
6. **Unit:** The unit of measurement standardises how data are reported, ensuring that comparisons between subsets remain consistent and meaningful.

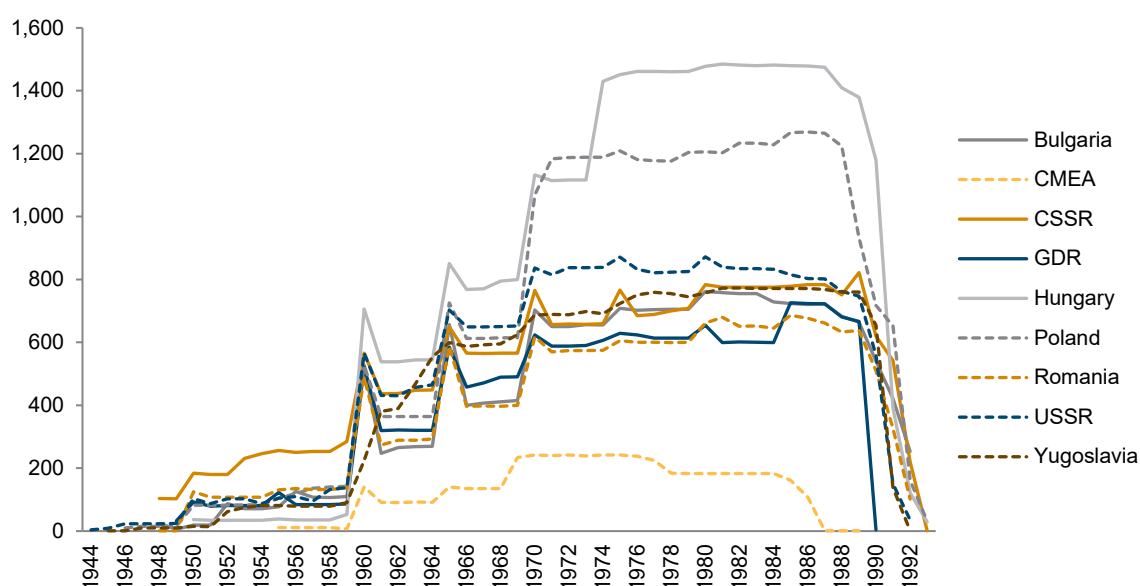
DATASET SCOPE

The dataset encompasses time-series data from 1944 to 1993, covering various economic indicators across multiple countries within the former socialist bloc. Due to differences in reporting across time, countries and topics, it is necessary to be acquainted with the specific features of the dataset with regard to temporal, regional and topical coverage.

Temporal coverage

The temporal coverage of the dataset exhibits significant variability. The three main features are the significant data gaps before 1970; reporting spikes around the five-year planning periods; and the post-1989 decline in reporting.

Figure 3 / Time series count by country



Source: wiiw COMECON Dataset.

As Figure 3 shows, the data coverage is uneven across the time span: the 1960s and 1970s often only show five-year periods. This is something that was based on an internal wiiw decision (in line with the format of the initial COMECON yearbooks). Although the individual intervening years would be available

in the national yearbooks, they could not be included in this project phase, due to time constraints. Priority was given to the years that were aligned with the five-year planning cycles of the socialist economies.

Regional coverage

The dataset covers nine countries – Albania, Bulgaria, the ČSSR, the GDR, Hungary, Poland, Romania, the USSR, Yugoslavia – and one combined region (i.e. the CMEA region itself). Hungary and Poland have the most detailed coverage, with 1,200 and 1,400 time series, respectively, reported in the period covering 1970 to the late 1980s. Data on the ČSSR, the USSR, Bulgaria and Yugoslavia are significantly less detailed: the number of time series ranges from 700 to 800 for each. There is even less information for the GDR and Romania, with slightly over 600 time series for each; while Albania, with around 400, has the lowest number of time series. The CMEA is the least well covered: this is a result of the challenges faced in harmonising national data across countries within the bloc to produce coherent series, and a more limited reporting scope for CMEA as a reporting unit in the first place.

Topical coverage

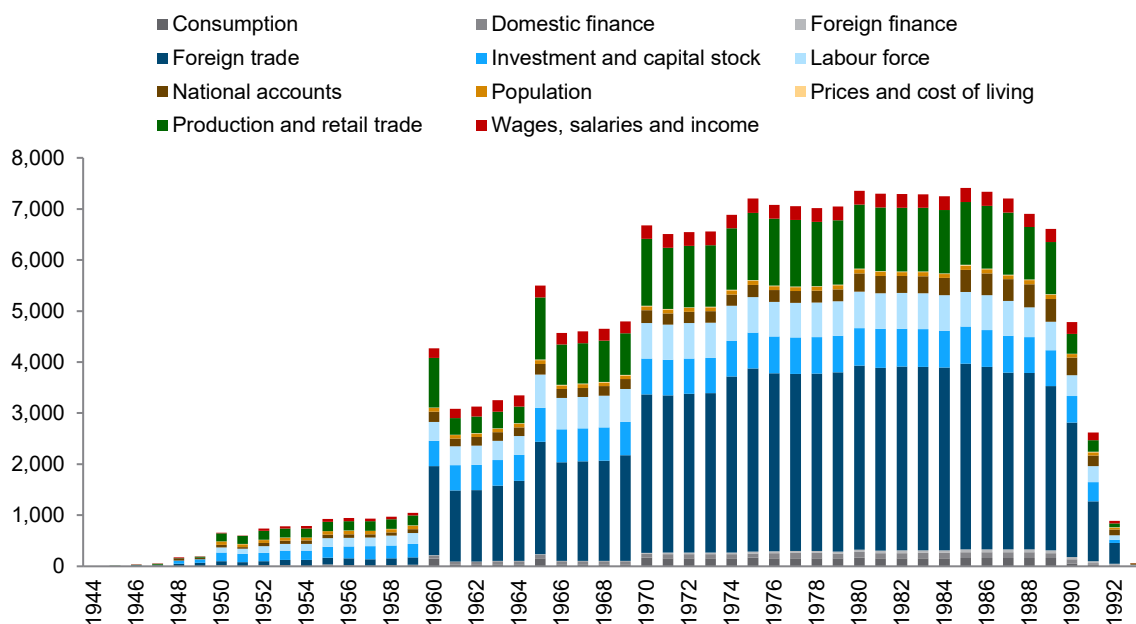
The dataset organises its time-series data into 11 distinct chapters, each focusing on a key aspect of economic and social indicators.

1. **Population:** birthrates, death rates, natural increase, resident population
2. **National accounts:** gross domestic product, gross social product, national income
3. **Investment and capital stock:** capital stock and gross investment volumes
4. **Labour force:** economically active persons, employees, labour productivity, unemployment
5. **Wages, salaries and income:** wage rates and income by different groups
6. **Production and retail trade:** gross industrial production, agricultural production and input
7. **Prices and cost of living:** indices of consumer/retail prices and of cost of living
8. **Consumption:** volume of goods consumed by different product groups at a product level
9. **Domestic finance:** estimations of government finance, credit volume, money in circulation and amount of savings
10. **Foreign trade:** export/import volumes by product or partner, UN currency conversion factor
11. **Foreign finance:** estimations of external sovereign debt, assets abroad, exports and imports

It is worth noting, however, that the depth of coverage varies from chapter to chapter (see Figure 4). Foreign trade emerges as the most reported section, which is driven by extensive product-level reporting. Production and retail trade shows extensive coverage for the same reason. Population, labour force and investment are not covered as extensively, but they extend back to 1950, due to the regularity of census data and the importance of demographic, labour and investment information for economic planning.

Coverage of other chapters is much less comprehensive – for example, of the financial sector, which played a limited role in the planned economies.

Figure 4 / Time series count by chapter

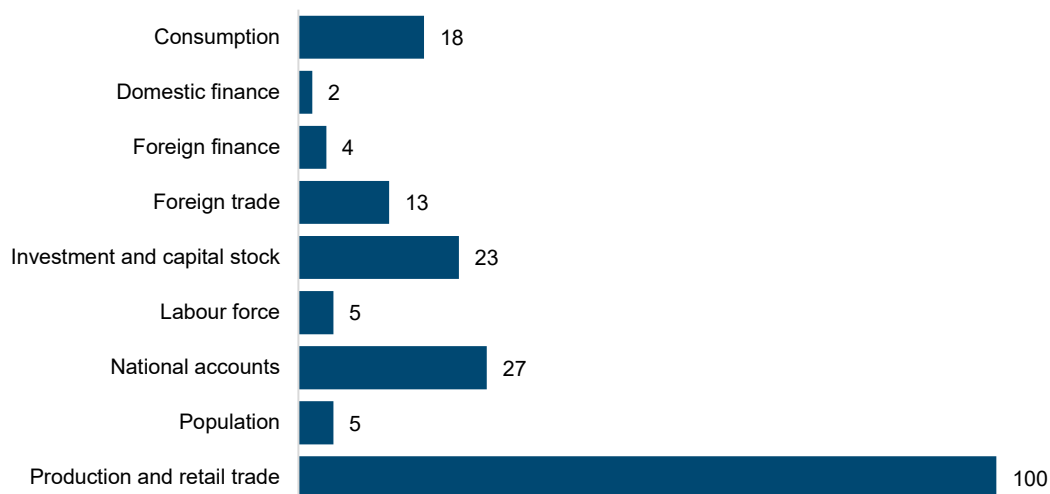


Source: wiiw COMECON Dataset.

Comparability

Despite the significant harmonisation efforts, reporting differences over time, country and topic remain a challenge for cross-country comparisons. Most of those differences stem from the primary sources and reflect the diverse approaches in national reporting definitions.

Figure 5 / Comparable time series available for all countries, by chapter



Note: The chapters wages and prices are not included because there are no comparable time series for all countries.
 Source: wiiw COMECON Dataset.

Figure 5 shows that – even without considering the unit measure – the number of comparable indicators available for all countries is (with the exception of production and retail trade) below 30 per chapter. Production statistics have the best comparability, benefiting from the harmonisation efforts of the CMEA yearbooks.

The comparability of time series in real terms is limited, as well. National statistical offices usually provided the time series on the basis of constant prices (e.g. 1976 constant prices, 1984 constant prices, etc.). In this case, there are two main limitations. First, when introducing a new constant price basis, no recalculation backwards was available from the national source. To obtain continuous time series, wiiw concatenated the time series backwards with a coefficient of the new and old constant price basis. This method allows real growth rates to be retained, but the disadvantage is that subcomponents are no longer additive, except for the period originally provided by the given statistical office. Second, among the eight reporting countries, the available base of constant prices is always different, so a comparison between countries is only possible to a limited extent.

Finally, it should be noted that, in order to capture all these limitations, this dataset attempts to describe all deviations from the defined standards (where this was clearly recognisable from the original source) in the 'Notes' field.

REFERENCES

- Bukowski, P. & Novokmet, F. (2021). Between communism and capitalism: Long-term inequality in Poland, 1892–2015. *Journal of Economic Growth*, 26(2), 187-239.
- Gaidar, Y. (2010). *Collapse of an Empire: Lessons for Modern Russia*. Washington, DC: Brookings Institution Press.
- Kukić, L. (2018). Socialist growth revisited: Insights from Yugoslavia. *European Review of Economic History*, 22(4), 403-429.
- Lavigne, M. (1999). *The Economics of Transition: From socialist economy to market economy*. London: Palgrave.

Why did socialism collapse? Insights from our new COMECON Dataset

BY BRANIMIR JOVANOVIĆ

In this article, we explore why the socialist systems in Eastern Europe collapsed around 1990, drawing on our newly digitised wiiw COMECON Dataset. We revisit traditional explanations framed as the 'jockey' (policy decisions), the 'horse' (inherent systemic flaws) and the 'racetrack' (external environment), concluding that the collapse resulted from the interplay of all three factors. If any one of these factors had been different, socialism might well have survived.

The collapse of socialism in Eastern Europe remains one of the most significant geopolitical shifts of the 20th century. While numerous studies and books have already examined the issue, our recent report *'The jockey, horse and racetrack revisited: Why did CESEE's command economies collapse?'*¹ revisits the question, drawing on our newly released wiiw COMECON Dataset and reports that the wiiw was publishing at the time, trying to provide some fresh insights. This article highlights some of the key findings from the study.

SOLID GROWTH UNTIL 1980 BUT SLOWDOWN AFTERWARDS, OWING TO WEAK INVESTMENT

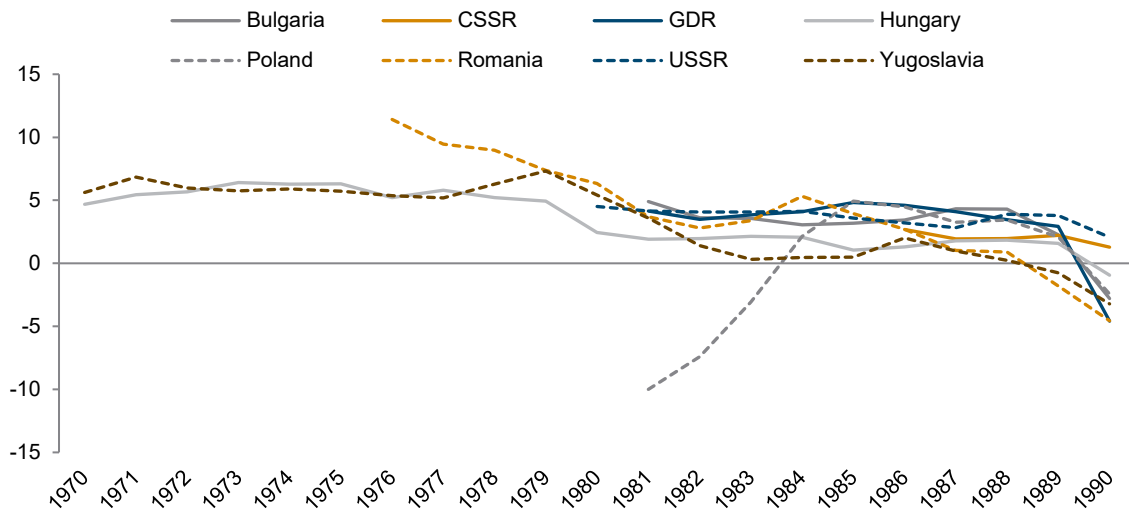
As the 1980s approached, the challenges faced by the socialist economies were becoming increasingly apparent, though the situation was not entirely bleak. Until 1980, growth consistently exceeded 5% in the countries with available data, but a notable slowdown began to emerge around this period (Figure 1). In Romania, the slowdown started earlier but from a relatively higher base. Poland's experience stands out – the economy suffered sharply negative growth in the early 1980s before returning to positive territory by 1984. Interestingly, the first oil shock of 1973 had a relatively limited impact on growth in these economies, unlike in Western Europe. This was due to the favourable oil pricing policy the Soviet Union employed in its trade with these countries at the time. However, this policy was changed in 1975, leading to significant problems in the years that followed (a topic explored in more detail later in this article).

Examining available data on national income through the expenditure approach, which breaks national income into public consumption, private consumption and accumulation, provides valuable insights into most COMECON countries from the 1960s onward. The general trend shows that real growth was exceptionally strong across all major expenditure components during the 1960s. It remained solid, though already decelerating in many cases, throughout the 1970s, before slowing significantly or even turning negative during the 1980s (Figure 2). The primary cause of this slowdown was the consistent decline in accumulation growth – comprising investment and stock accumulation – across all countries

¹ Grieveson, R., Holzner, M., & Jovanović, B. (2024). *The jockey, horse and racetrack revisited: Why did CESEE's command economies collapse?* (wiiw Research Report No. 477). Vienna Institute for International Economic Studies (wiiw). <https://wiiw.ac.at/the-jockey-horse-and-racetrack-revisited-why-did-cesee-s-command-economies-collapse-dlp-7080.pdf>

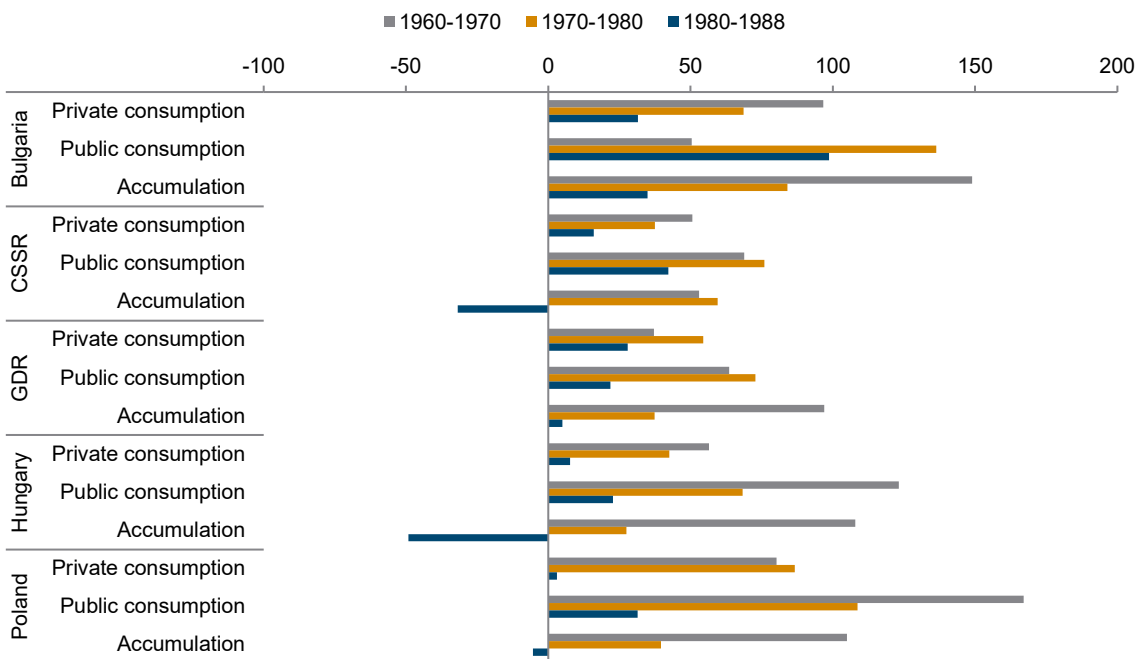
during this period. In the CSSR, Hungary, and Poland, accumulation growth even turned negative in the 1980s. This indicates that the main driver of the economic decline in COMECON countries during the 1980s was the sustained lack of investment.

Figure 1 / Real GDP growth, % per year



Source: wiiw COMECON Dataset.

Figure 2 / National income by expenditure approach, real, % change



Source: wiiw COMECON Dataset.

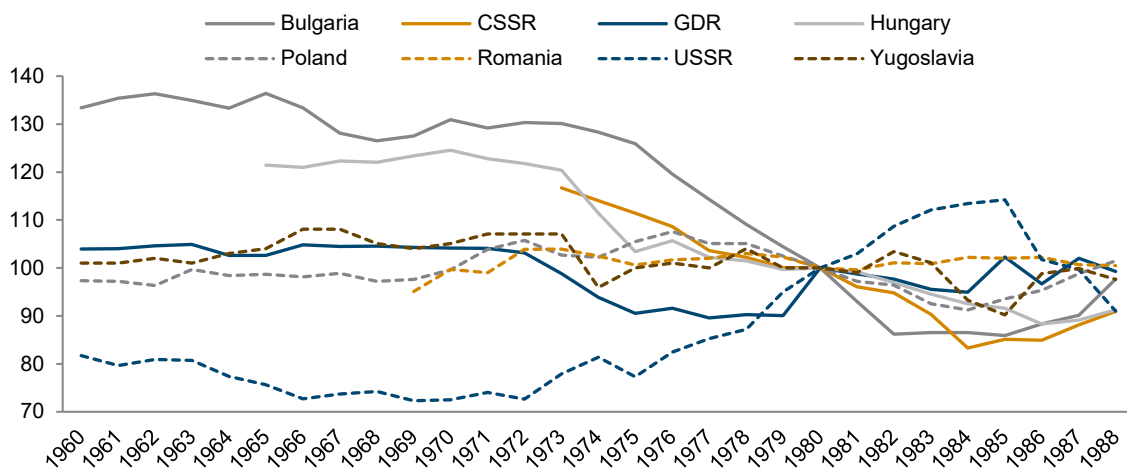
THE GLOBAL ENVIRONMENT WAS CERTAINLY NOT VERY FAVOURABLE IN THE 1970S AND 1980S

The first explanation for the collapse of socialism is that it happened due to the unfavourable global environment, shaped by the oil shocks and rising global interest rates. The 1973-74 oil price shock indeed marked a turning point for the COMECON countries, as it led the Soviet Union to change its long-standing oil pricing policy. Prior to the shock, the USSR sold oil to COMECON countries at fixed prices, set for five years and typically well below market levels. In 1975, this was replaced with a pricing system based on a five-year moving average of global oil prices, adjusted annually. This extended the pain of the 1973-73 oil shock for COMECON economies well after the shocks were over.

Then when the 1979 oil shock came, accompanied by the rising global interest rates, the situation worsened further. A balance of payments crisis emerged everywhere in Eastern Europe, prompting severe austerity measures and a collapse in aggregate demand. The sharp decline in investment from 1980 mentioned before can largely be attributed to these events. The oil price hikes rendered many industries uncompetitive, while high Western interest rates made it increasingly difficult to finance the external debt accumulated during the 1970s.

However, the impact of these shocks was not uniform (Figure 3). The Soviet Union benefited from improved terms of trade, while outcomes varied significantly across other COMECON countries. Romania and Yugoslavia fared relatively better, whereas Bulgaria and the CSSR struggled. In some cases, such as Bulgaria and the CSSR, the scale of the terms of trade shock may have overwhelmed any potential policy response. Yet, other countries experienced less severe impacts, suggesting that the collapse of socialism cannot be attributed solely to these external shocks.

Figure 3 / Terms of trade with the rest of the world, 1980=100

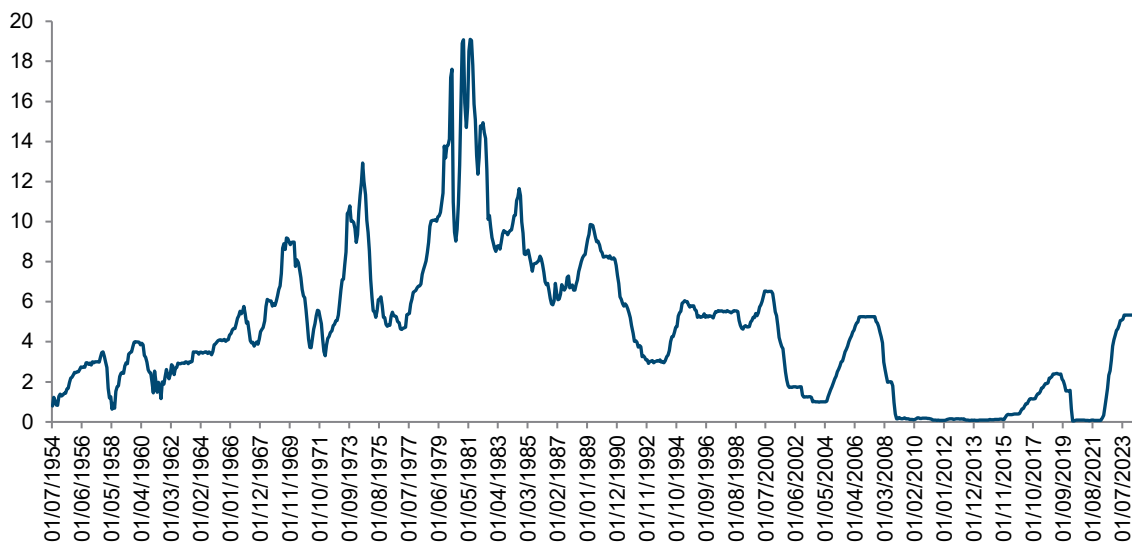


Source: wiiw COMECON Dataset.

A related explanation is that due to the oil shocks and the corresponding inflation, the US Fed carried out the most significant monetary tightening in the post-war history, which had severe repercussions for the socialist countries. Indeed, the US Federal funds rate increased from around 5% in 1977 to 19% in 1981 (Figure 4). This led to a sharp rise in the debt service costs of the Eastern European countries.

According to Schmidt (1985)², in the 1970s socialist countries could borrow at annual interest rates of around 6%. By 1981, the interest rates they were paying had risen to 19% per annum. The situation was made even more challenging by the fact that these countries held primarily short-term debt, which required frequent refinancing. This left them highly vulnerable to sudden and sharp fluctuations in interest rates.

Figure 4 / US Federal funds effective rate, %



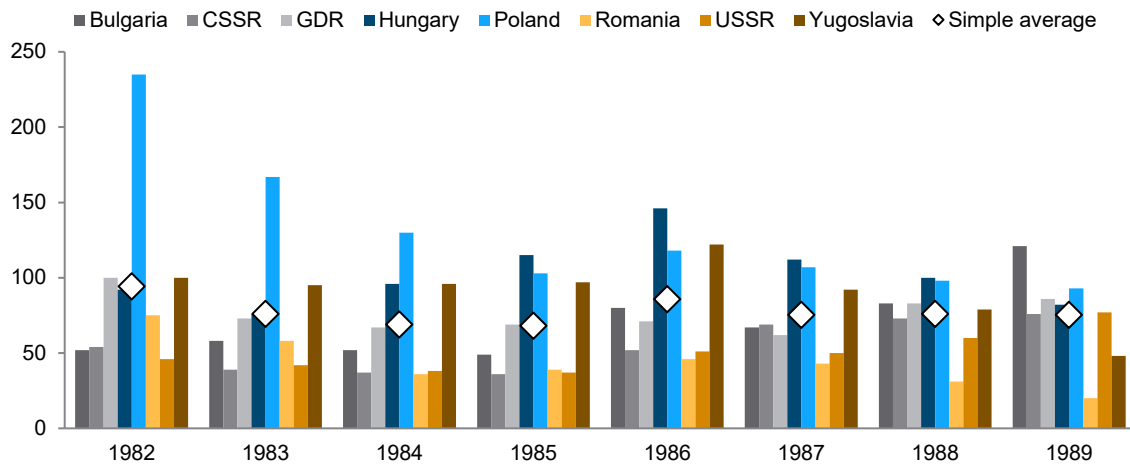
Source: Board of Governors of the Federal Reserve System.

The high interest rates, combined with the relatively low convertible exports of the socialist countries (exports paid in hard currencies that could be used to repay debt), resulted in very high debt service ratios in the 1980s. This was especially the case in Poland, Hungary and Yugoslavia. In these three countries, annual debt service ratios during the 1980s were close to or even exceeded the value of all annual convertible exports (Figure 5).

A final factor that we investigate in this group and that has not received a lot of attention in the literature, is related to the impact of weather and climate conditions on agriculture and economic activity. While average temperatures in the 1970s and 1980s were below the long-term average for the 1940-2024 period, individual years saw sharp temperature spikes. The years 1972 and 1975 were particularly severe, with spring and summer temperatures nearly 1.5°C above the long-term average. During years with higher temperatures in the grain-growing season (April to August), grain production in Eastern Europe declined sharply, with output dropping by 13% to 27% compared to the decade's average (Figure 6).

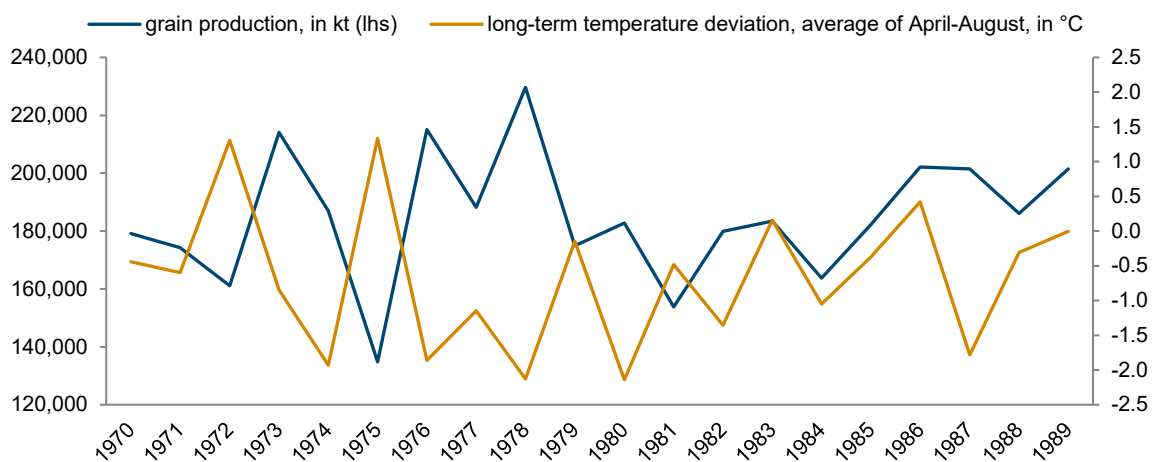
² Schmidt, Paul-Günther (1985). Hard currency indebtedness of the developed socialist countries. *Intereconomics*, 20(3), 114–121. <https://doi.org/10.1007/BF02928465>

Figure 5 / Debt service ratio, % of convertible exports



Source: wiiw COMECON Dataset.

Figure 6 / Eastern Bloc grain production and average temperatures during the grain-growing season, 1970-1989



Note: Sum of grain production and the average deviation of temperatures between April and August from the 1940-2024 period for the eight socialist countries analysed. Due to data availability, for the CSSR, the GDR, the USSR and Yugoslavia, we approximate temperature deviations using data from modern-day Czechia, Germany, Ukraine and Serbia. Sources: wiiw COMECON Dataset, OurWorldInData.org.

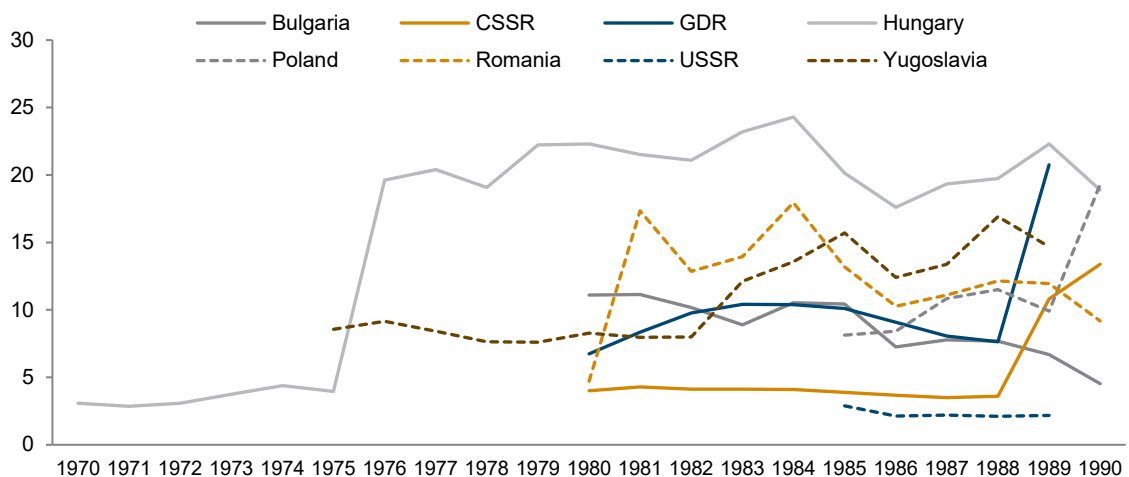
Econometric analysis shown in the report shows that these above-average temperatures had a statistically significant negative impact on grain yields. Furthermore, a second econometric analysis established a strong positive relationship between grain production and economic growth, supporting the thesis that fluctuations in grain output significantly influenced national income growth. In other words, adverse weather conditions disrupted agriculture, a sector with an outsized role in Eastern European economies, and also had broader macroeconomic repercussions. Poor harvests not only strained trade balances but also hindered overall economic activity. Combined with the oil shocks and high interest

rates of the same period, these climate-induced disruptions further constrained the capacity for growth in these economies.

THE COMMAND SYSTEM ALSO HAD ITS FLAWS

The primary reason the ex-socialist countries were hit hard by the rising interest rates of the late 1970s and early 1980s was their limited ability to generate convertible exports. During this period, only Hungary managed to achieve convertible exports exceeding 20% of GDP, while all other socialist countries remained below this threshold (Figure 7).

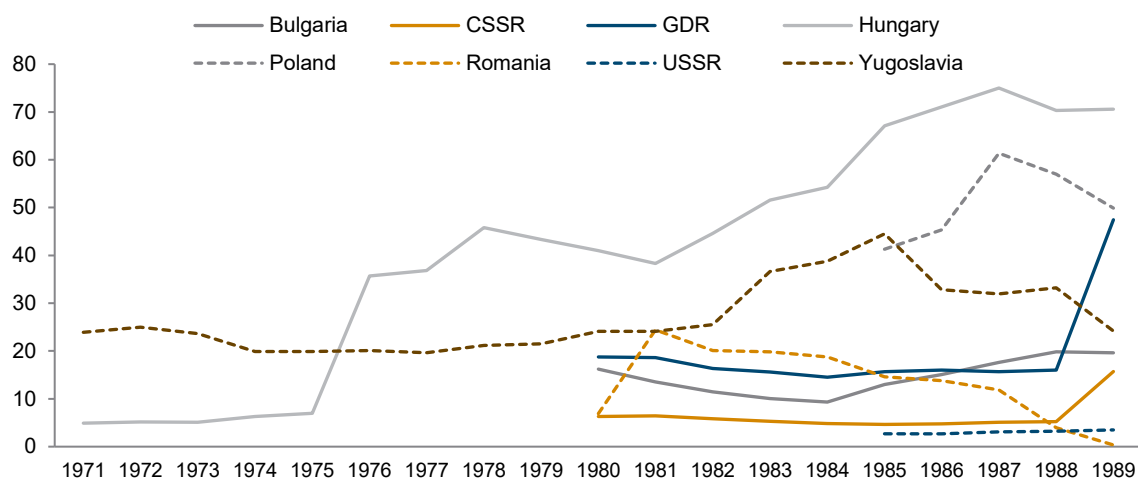
Figure 7 / Convertible exports, % of GDP



Source: wiiw COMECON Dataset; own calculations.

As a result of their low convertible export revenues, these countries struggled to service their external debt, even though their debt-to-GDP ratios were relatively low by contemporary standards. Hungary was the only country with relatively high external debt, reaching approximately 40% of GDP in the late 1970s and rising to 75% by the latter half of the 1980s. But even this would appear modest today. Poland's external debt exceeded 60% by the mid-1980s, while Yugoslavia experienced an increase from 25% to 45% over the same period. Meanwhile, the other countries managed to keep their external debt levels around or below 20% of GDP throughout the 1980s (Figure 8). Despite these seemingly moderate debt ratios, the lack of sufficient hard currency revenues left these economies vulnerable to external shocks and limited their ability to navigate the rising global interest rates of the time.

The root cause of the problem lay in the countries' lack of competitiveness and technological backwardness, which led to the production of outdated, low-quality goods that struggled to compete in Western markets. Compounding this were political factors that reinforced their economic isolation. Fearing that greater openness to the West might undermine socialism and pave the way for capitalism, these countries adopted restrictive trade policies and limited their integration with Western markets. This self-imposed isolation curtailed opportunities for economic modernisation and technological progress, leaving them further behind their Western counterparts.

Figure 8 / External debt, % of GDP

Source: wiiw COMECON Dataset; own calculations.

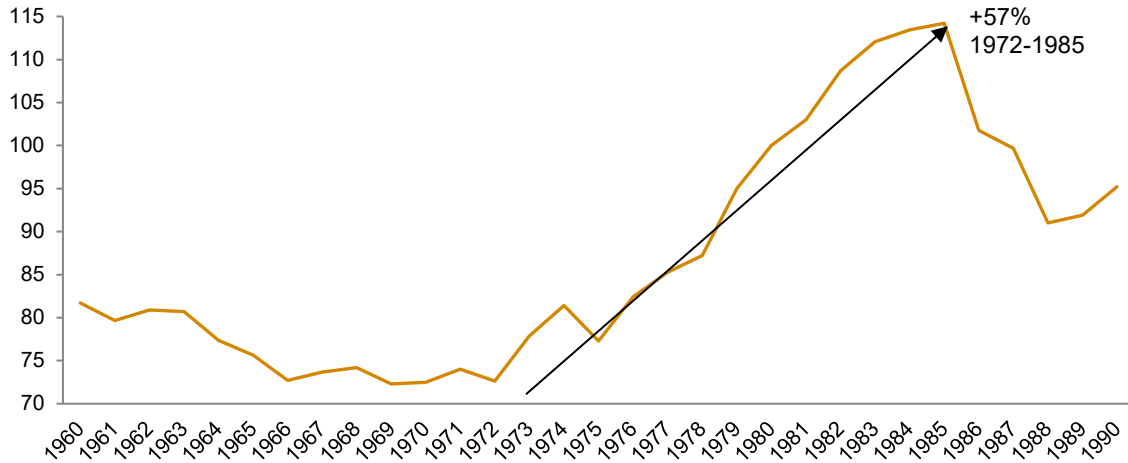
POLITICIANS MADE MANY MISTAKES AS WELL

The first major policy mistake happened years before the problems became apparent. That was the insufficient investment in the first two decades after the Second World War. While the post-war growth was largely driven by a shift in labour from agriculture to more productive industry, investment rates in the East lagged behind those in the West throughout the 1950s and 1960s. This began to change in the 1970s and 1980s, but by then it was too late to reverse the trend. The underinvestment of the earlier decades likely contributed to the economic slowdown of the 1980s. However, it is important to acknowledge that weak investment in the immediate post-war years was not entirely a policy choice. The demographic shocks of the war – such as widespread casualties, displacement and migration – led to labour shortages, which in turn constrained the capacity for investment.

The policies implemented in response to the oil shocks were also flawed. To secure hard currency for more expensive oil imports, many socialist countries redirected resources toward sectors with the greatest short-term export potential, such as low-productivity agriculture and food production, which had adverse long-term effects. At the same time, efforts to preserve hard currency led to restrictions on importing advanced Western technology, resulting in missed opportunities for productivity improvements and technological upgrading.

For the Soviet Union, the oil shocks initially provided a windfall. Between 1972 and 1985, the USSR experienced a significant and sustained improvement in its terms of trade (Figure 9). However, when oil prices collapsed sharply in the latter half of the 1980s, the USSR found itself dangerously exposed. Compounding the problem, the Soviet Union, despite having the resources to continue subsidising other socialist countries, chose to start charging them market prices for oil in 1975, as explained before. It, in a way, abandoned its allies, which further deepened their economic struggles.

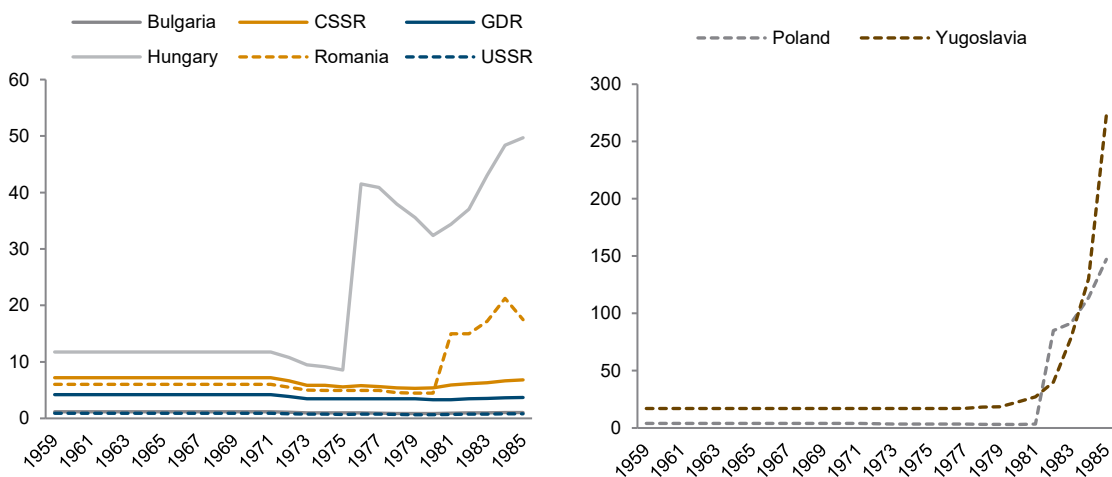
Figure 9 / USSR terms of trade, 1980=100



Source: wiiw COMECON Dataset.

Another policy mistake was that many of the socialist countries devalued their currencies in the 1970s and 1980s, hoping to address current account problems but ultimately exacerbating them. In 1981, the Romanian leu was devalued threefold, from 4.5 ROL per USD in 1980 to 15 ROL per USD. Hungary saw its forint devalued fivefold in 1976, from 8.6 HUF per USD in 1975 to 41.5 HUF per USD. The Yugoslav dinar experienced an even steeper decline, devalued more than fifteenfold between 1979 and 1985, from 18.6 YUD per USD to 273 YUD per USD. Poland's zloty suffered the sharpest drop, devalued more than twentyfold in 1982, from 3.4 PLZ per USD in 1981 to 85 PLZ per USD (Figure 10).

Figure 10 / Nominal exchange rates, NCU per USD



Note: The data refer to the conversion factors for the exports.
 Source: wiiw COMECON Dataset; own calculations.

The rationale behind these devaluations was the hope of reducing current account deficits by stimulating exports and curbing imports. However, this strategy was fundamentally flawed in the context of socialist economies, where the barriers to exporting to Western markets were structural rather than price-related.

Eastern Bloc products were already priced low, but their exports were constrained by poor quality, outdated technology, limited export capacity due to central planning, trade barriers and a lack of business knowledge and networks. In essence, both exports and imports were largely insensitive to price changes.

The trade regressions presented in our report support this conclusion. These regressions related convertible exports and imports to the nominal exchange rate (as a proxy for price competitiveness) and foreign/domestic GDP (as a proxy for income). The findings revealed that the exchange rate coefficient was statistically insignificant, while the GDP coefficient was highly significant and substantial in size. This underscores that convertible trade flows in socialist countries were not influenced by exchange rate movements, making devaluations ineffective in addressing trade imbalances.

Rather than improving current account positions, these devaluations exacerbated inflation. A separate regression analysis showed that price levels in Eastern European countries between 1960 and 1990 were strongly and significantly affected by the nominal exchange rate. This suggests that the devaluations implemented during the 1970s and 1980s likely contributed to the inflation spikes that followed.

The resulting inflation reduced real incomes by driving up prices, which dampened consumption and economic activity. Moreover, devaluations raised debt servicing costs, as foreign loans became more expensive in domestic currency terms, further straining the already fragile financial systems of these economies. Instead of solving the problems they were meant to address, devaluations deepened economic instability.

A TOXIC MIX THAT FINISHED THE PATIENT

Thus, one could argue that the collapse of the socialist system resulted from a toxic mix of an unfavourable global environment, structural flaws within the command system and policy blunders by socialist policymakers.

Regarding the global environment, the oil shocks of the 1970s had a profound effect, especially for oil-importing socialist economies. Later, the oil price decline of the 1980s negatively impacted the Soviet Union. The Volcker interest rate shocks in the early 1980s further compounded these pressures, driving up debt servicing costs for countries that had borrowed heavily previously.

One underexplored factor we have found to be very important are the extreme weather events. High temperatures in 1972 and 1975 led to significant declines in grain production, reducing hard currency export revenues, worsening current account deficits and undermining economic activity.

The impact of these adverse external shocks was exacerbated by the structural limitations of command economies, which had low convertible export capacity due to their closed nature, low competitiveness and technological backwardness.

Policy mistakes further magnified these challenges. Major underinvestment before 1970 left these economies technologically behind, while misguided trade and export strategies in response to the 1970s

oil shocks failed to address structural weaknesses. The Soviet Union squandered its oil windfall from 1973 to 1985, and exchange rate mismanagement in countries like Hungary, Poland, Romania, and Yugoslavia created additional financial pressures.

A particularly damaging decision was the Soviet Union's 1975 shift from the Bucharest Principle of fixed five-year oil prices to the Moscow Principle of annually adjusted five-year moving averages tied to world market prices. This exposed other COMECON countries to the full force of the 1970s energy crisis, exacerbating their economic woes.

In the end, socialism collapsed because external shocks exposed and intensified the deep vulnerabilities of the socialist economies, which had been fragile and in need of reforms for some time. When these shocks struck, policymakers made decisions that not only failed to mitigate the damage but instead exacerbated the crisis.

Had any one of these factors been different – if external shocks had been less severe, if reforms had been implemented earlier, or if policymakers had made better decisions – it is possible that socialism might have endured. However, the interplay of these elements proved insurmountable, leaving us to think about these events and to write articles like this one.

Monthly and quarterly statistics for Central, East and Southeast Europe

The monthly and quarterly statistics cover **23 countries** of the CESEE region. The graphical form of presenting statistical data is intended to facilitate the **analysis of short-term macroeconomic developments**. The set of indicators captures trends in the real and monetary sectors of the economy, in the labour market, as well as in the financial and external sectors.

Baseline data and a variety of other monthly and quarterly statistics, **country-specific** definitions of indicators and **methodological information** on particular time series are **available in the wiiw Monthly Database** under: <https://data.wiiw.ac.at/monthly-database.html>. Users regularly interested in a certain set of indicators may create a personalised query which can then be quickly downloaded for updates each month.

Conventional signs and abbreviations used

%	per cent
ER	exchange rate
GDP	Gross Domestic Product
HICP	Harmonised Index of Consumer Prices (for new EU member states)
LFS	Labour Force Survey
NPISHs	Non-profit institutions serving households
p.a.	per annum
PPI	Producer Price Index
reg.	registered
y-o-y	year on year

The following national currencies are used:

ALL	Albanian lek	HUF	Hungarian forint	RON	Romanian leu
BAM	Bosnian convertible mark	KZT	Kazakh tenge	RSD	Serbian dinar
BGN	Bulgarian lev	MDL	Moldovan leu	RUB	Russian rouble
BYN	Belarusian rouble	MKD	Macedonian denar	TRY	Turkish lira
CZK	Czech koruna	PLN	Polish zloty	UAH	Ukrainian hryvnia

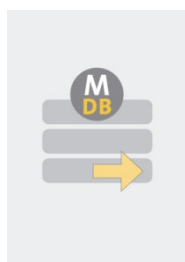
EUR euro – national currency for Montenegro, Kosovo and for the euro-area countries Estonia (from January 2011, euro-fixed before), Latvia (from January 2014, euro-fixed before), Lithuania (from January 2015, euro-fixed before), Slovakia (from January 2009, euro-fixed before), Slovenia (from January 2007, euro-fixed before) and Croatia (from January 2023, euro-fixed before).

Sources of statistical data: Eurostat, National Statistical Offices, Central Banks and Public Employment Services; wiiw estimates.

Online database access



wiiw Annual Database



wiiw Monthly Database



wiiw FDI Database

The wiiw databases are accessible via a simple web interface, with only one password needed to access all databases (and all wiiw publications).

You may access the databases here: <https://data.wiiw.ac.at>.

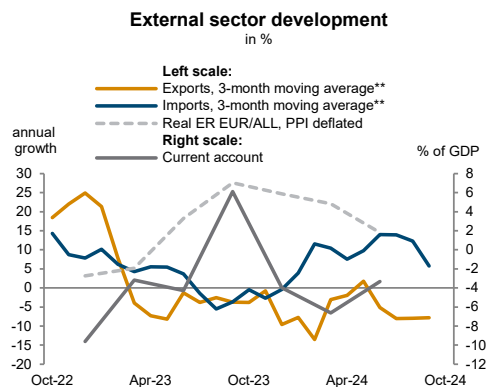
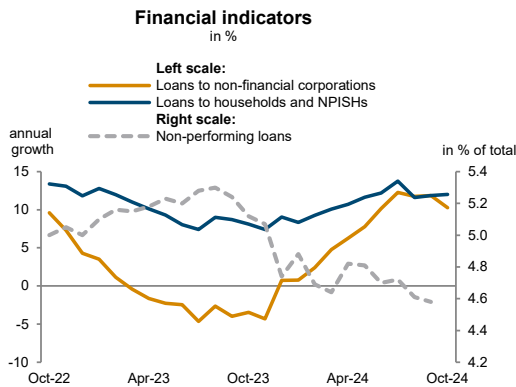
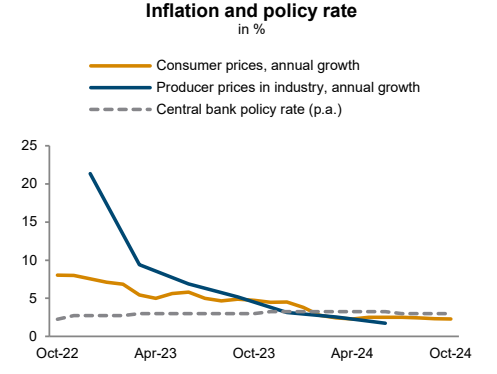
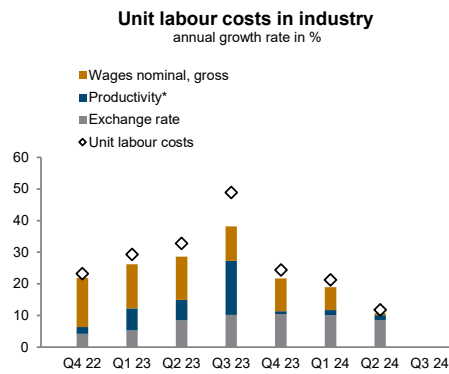
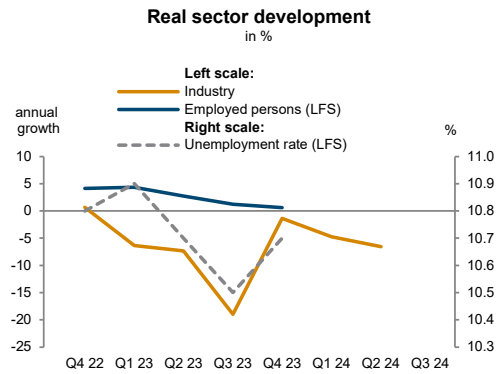
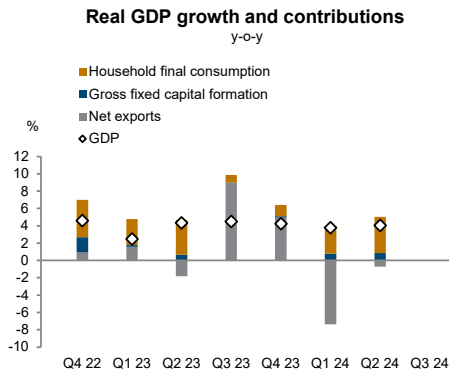
If you have not yet registered, you can do so here: <https://wiiw.ac.at/register.html>.

Service package available

We offer an additional service package that allows you to access all databases – a wiiw Membership, at a price of € 2,700. Your usual package will, of course, remain available as well.

For more information on database access for Members and on Membership conditions, please contact Ms. Monika Potocnik (potocnik@wiiw.ac.at), phone: (+43-1) 533 66 10.

Albania

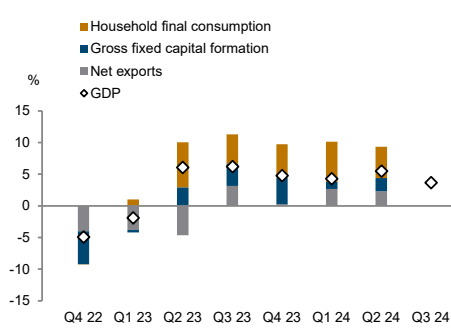


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

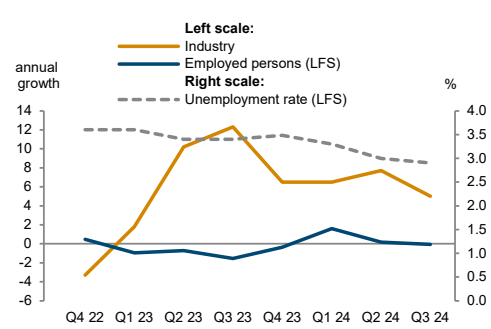
Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Belarus

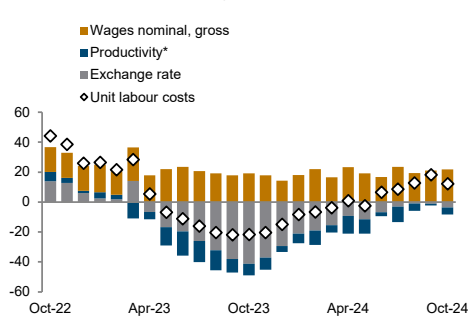
Real GDP growth and contributions



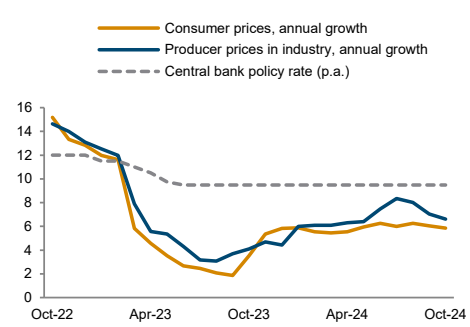
Real sector development



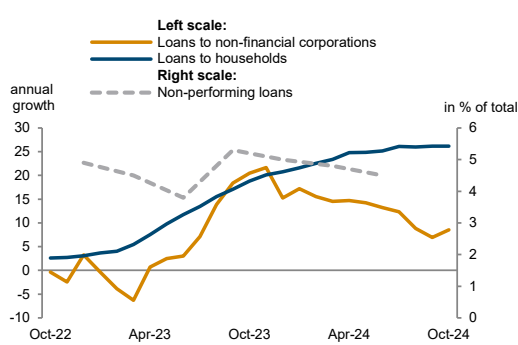
Unit labour costs in industry



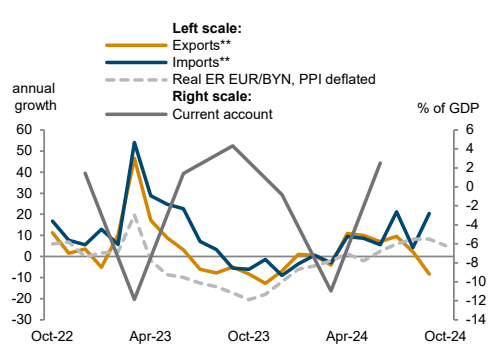
Inflation and policy rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

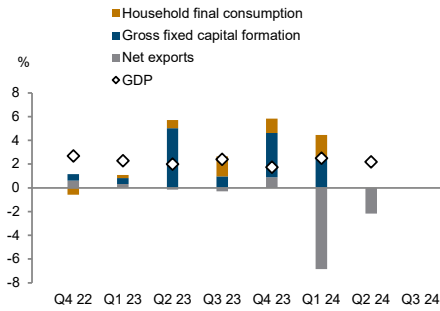
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

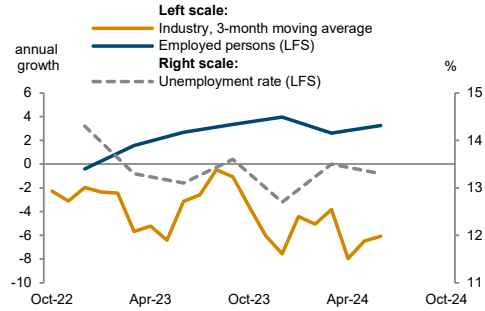
<https://data.wiiw.ac.at/monthly-database.html>

Bosnia and Herzegovina

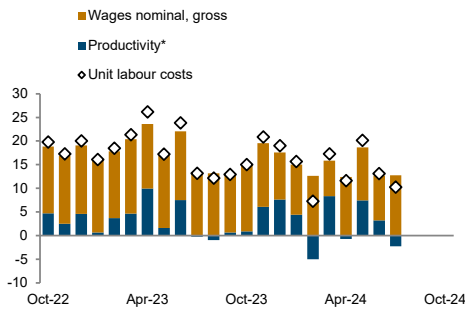
Real GDP growth and contributions
y-o-y



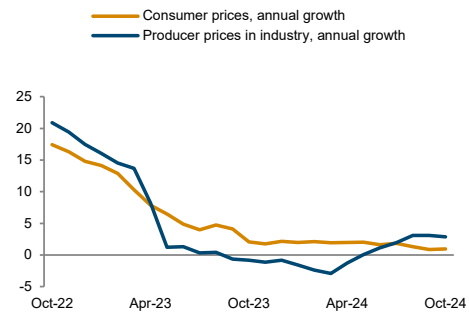
Real sector development
in %



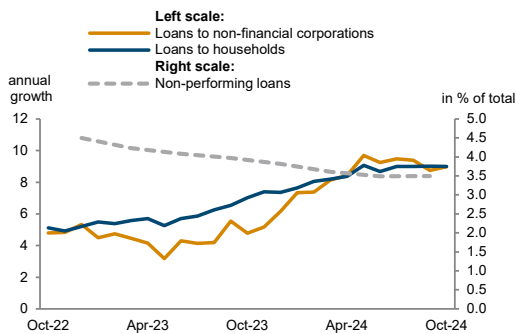
Unit labour costs in industry
annual growth rate in %



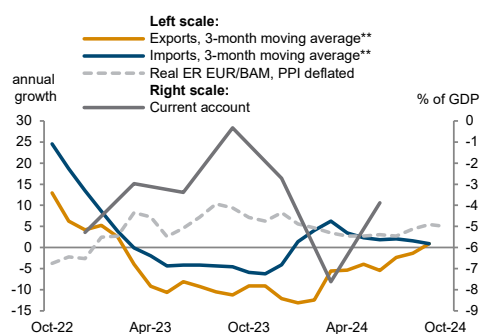
Inflation
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

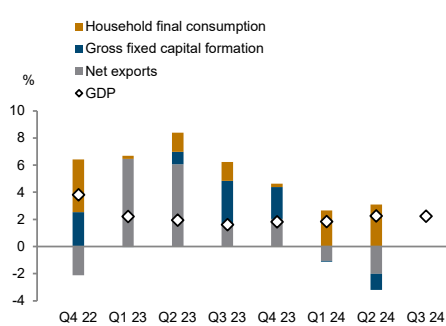
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

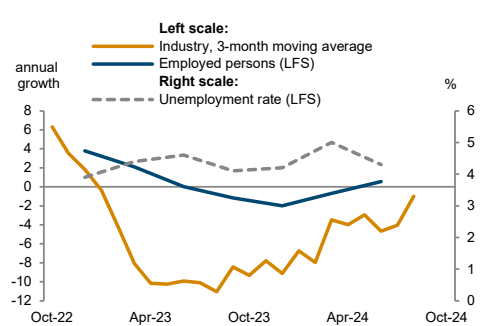
<https://data.wiiw.ac.at/monthly-database.html>

Bulgaria

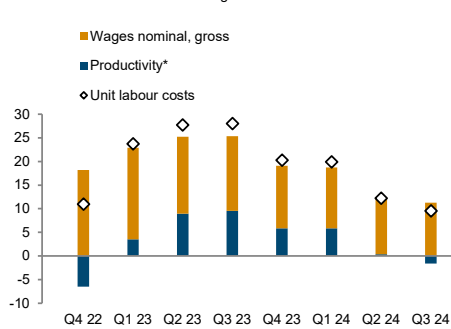
Real GDP growth and contributions



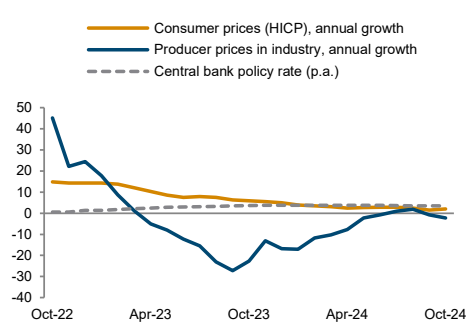
Real sector development



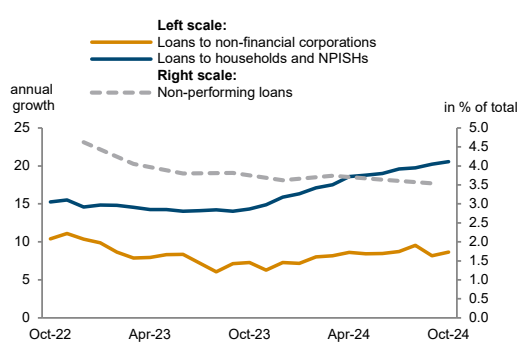
Unit labour costs in industry



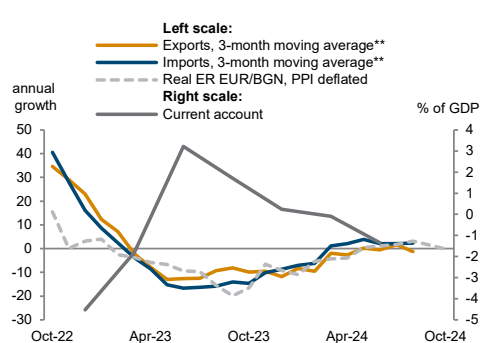
Inflation and policy rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

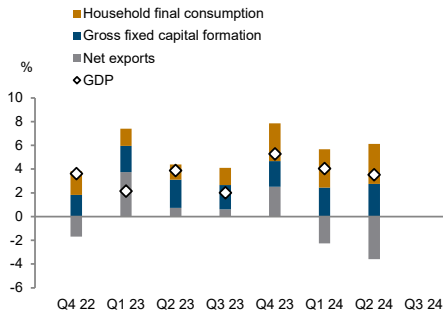
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

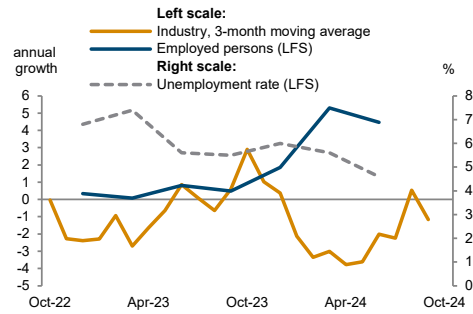
<https://data.wiiw.ac.at/monthly-database.html>

Croatia

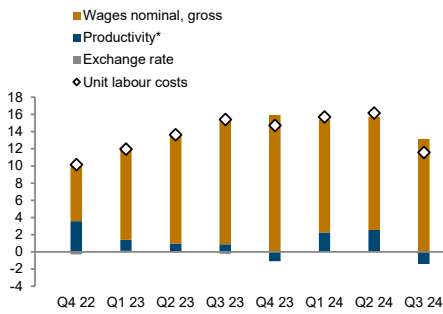
Real GDP growth and contributions
y-o-y



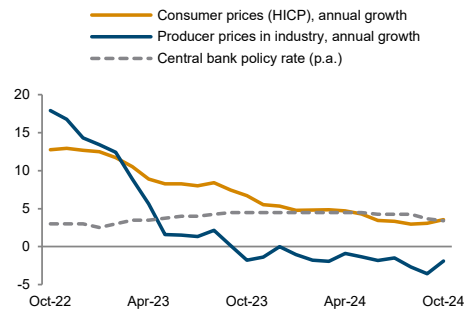
Real sector development
in %



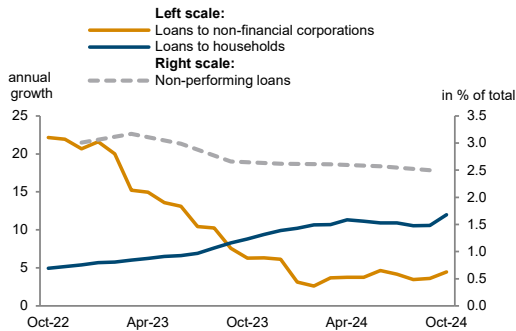
Unit labour costs in industry
annual growth rate in %



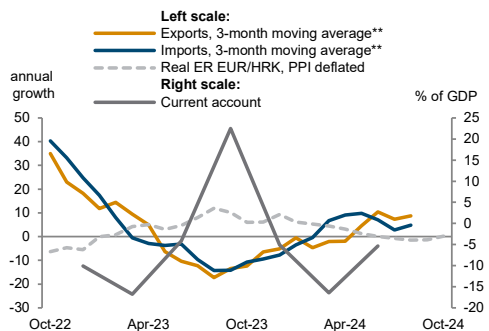
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

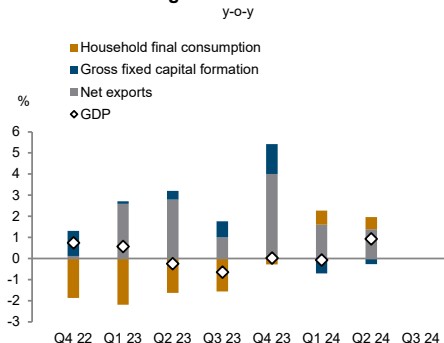
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

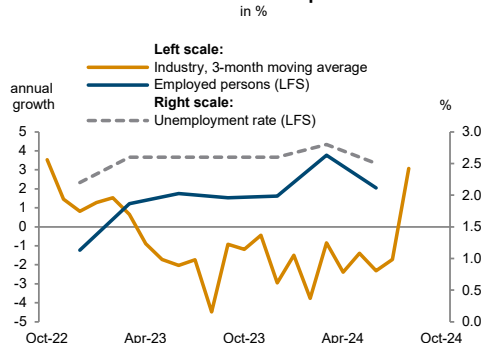
<https://data.wiiw.ac.at/monthly-database.html>

Czechia

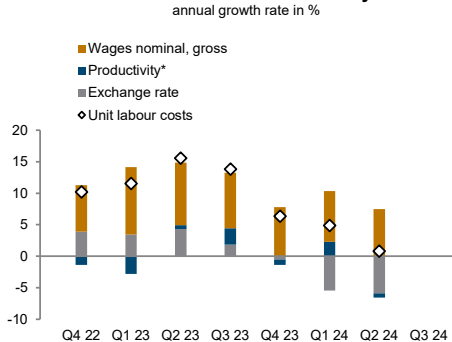
Real GDP growth and contributions



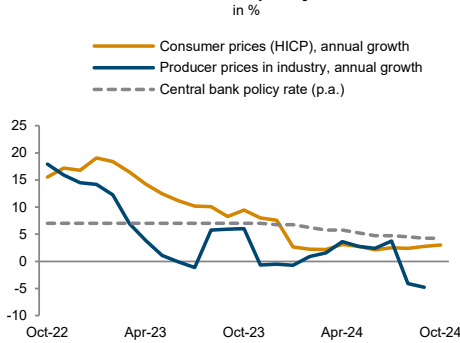
Real sector development



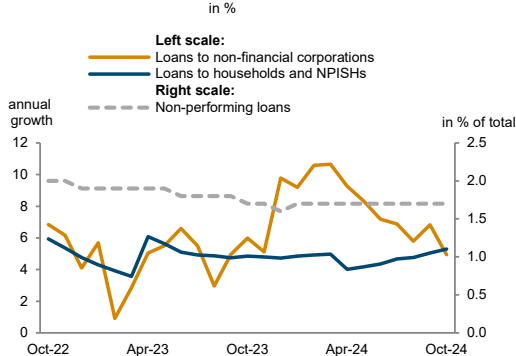
Unit labour costs in industry



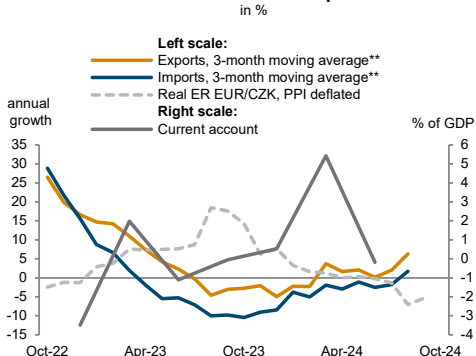
Inflation and policy rate



Financial indicators



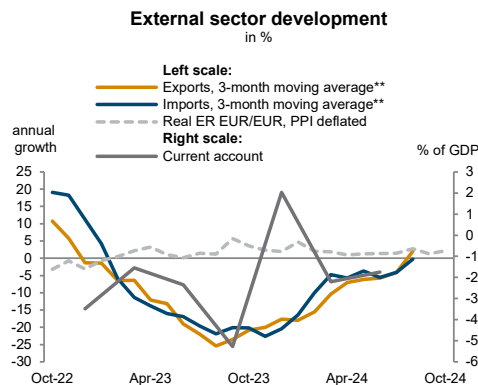
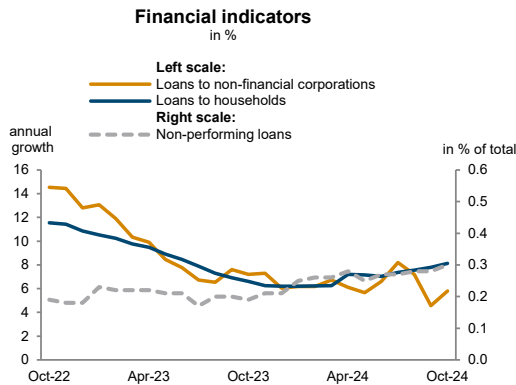
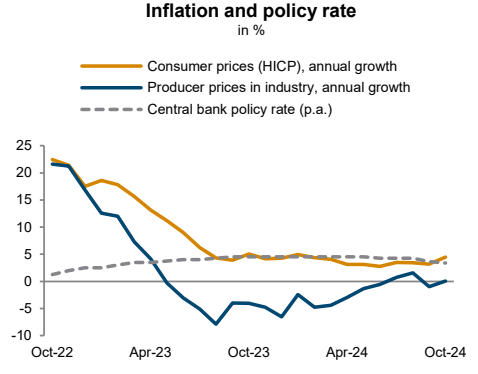
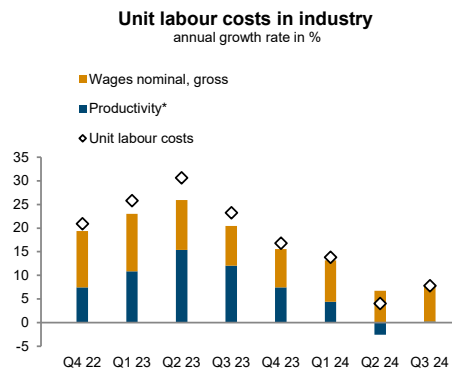
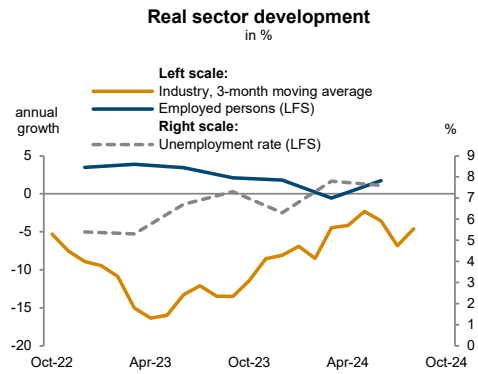
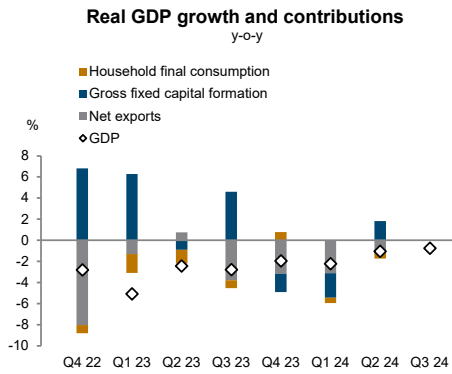
External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Estonia



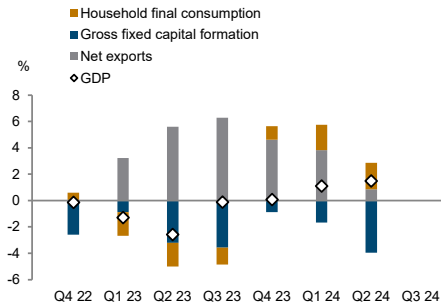
*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
 **EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.
 Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Hungary

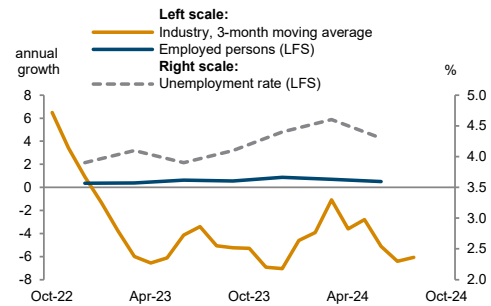
Real GDP growth and contributions

y-o-y



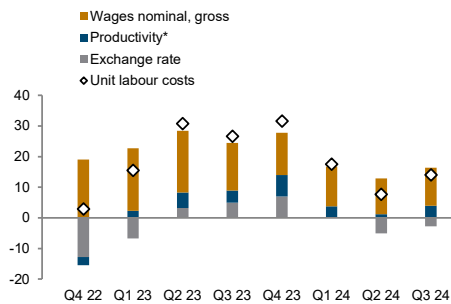
Real sector development

in %



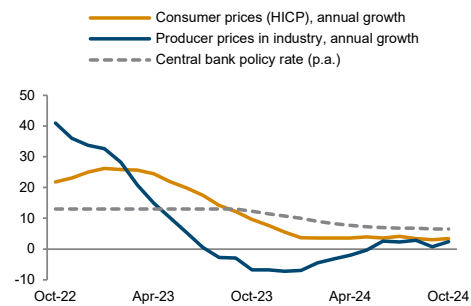
Unit labour costs in industry

annual growth rate in %



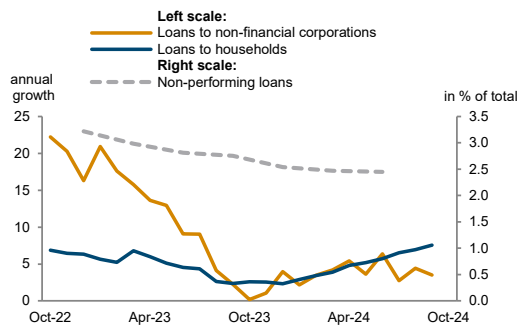
Inflation and policy rate

in %



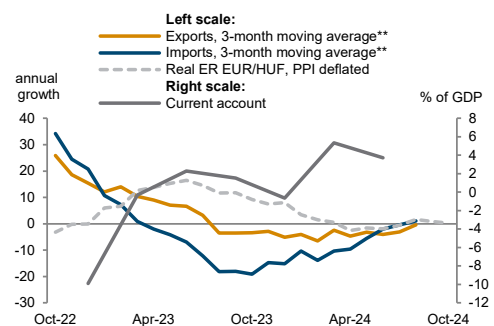
Financial indicators

in %



External sector development

in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

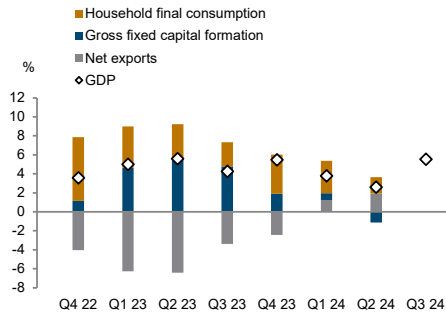
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

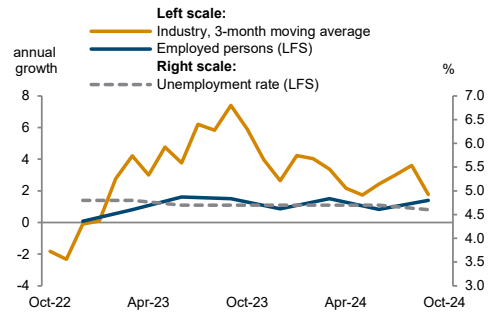
<https://data.wiiw.ac.at/monthly-database.html>

Kazakhstan

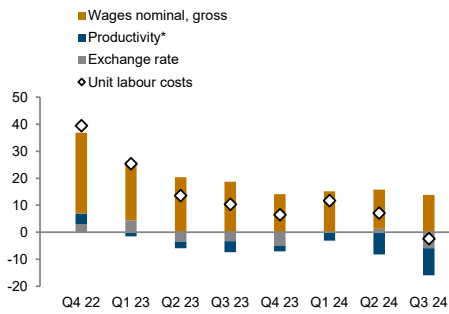
Real GDP growth and contributions
y-o-y



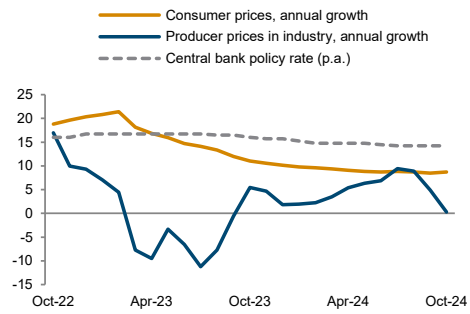
Real sector development
in %



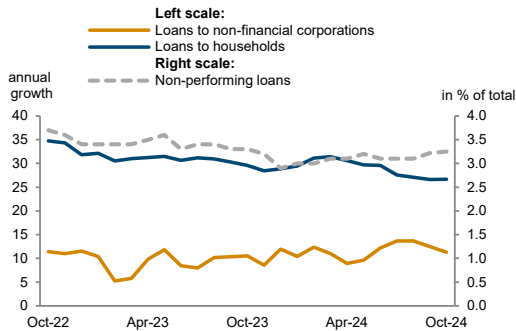
Unit labour costs in industry
annual growth rate in %



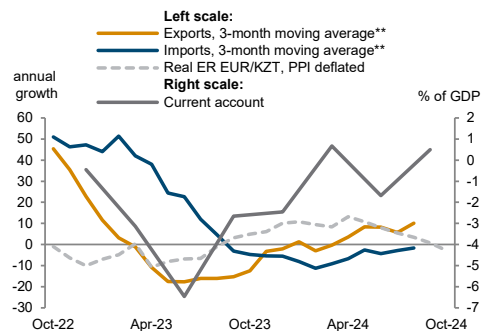
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

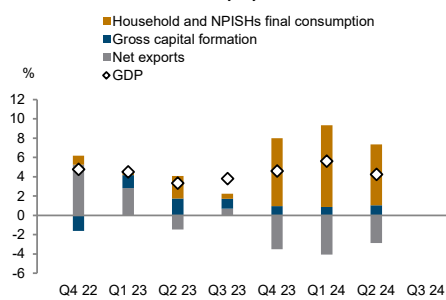
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

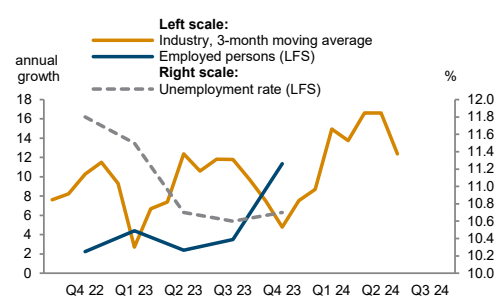
<https://data.wiiw.ac.at/monthly-database.html>

Kosovo

Real GDP growth and contributions



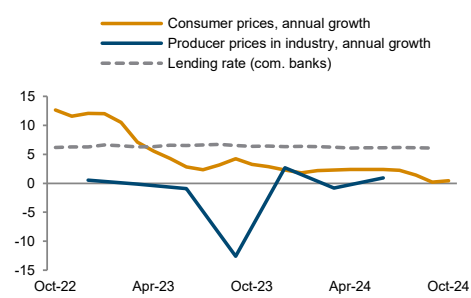
Real sector development



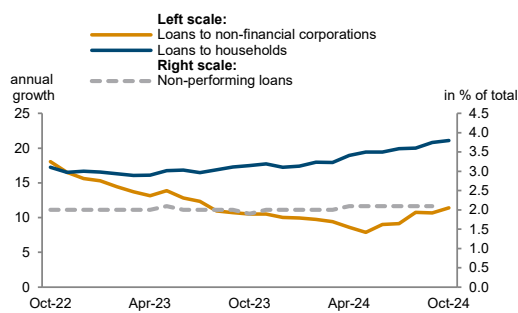
Productivity in industry



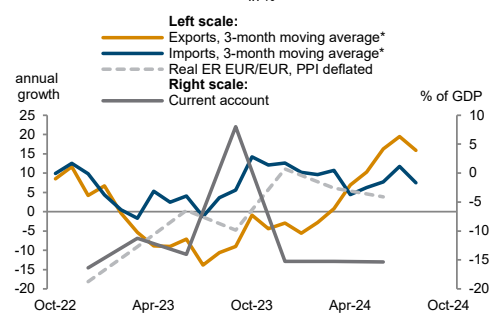
Inflation and lending rate



Financial indicators



External sector development



*EUR based.

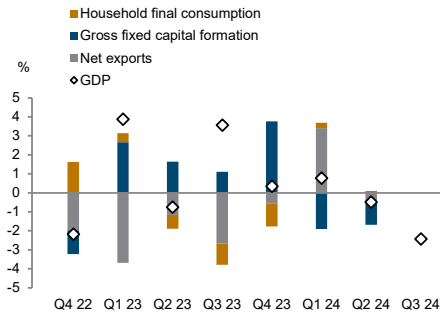
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

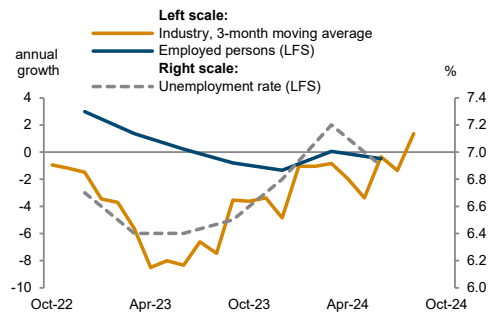
<https://data.wiiw.ac.at/monthly-database.html>

Latvia

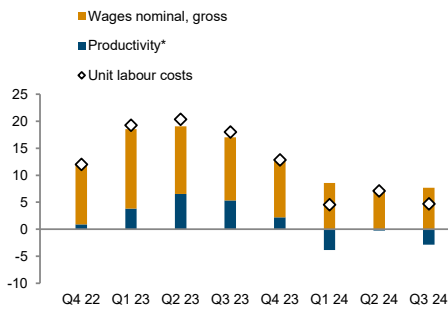
Real GDP growth and contributions
y-o-y



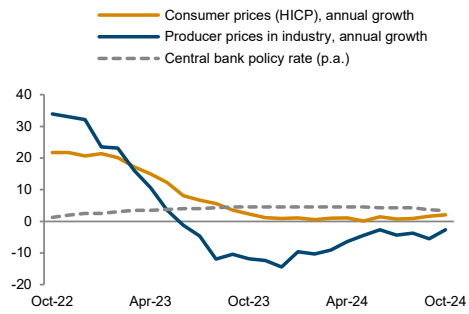
Real sector development
in %



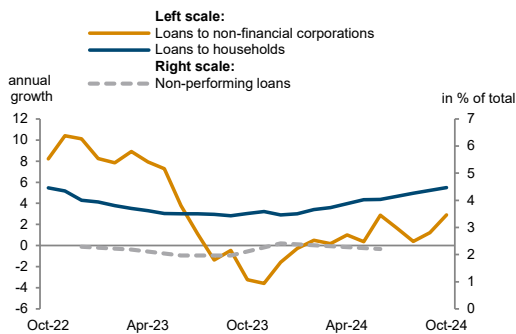
Unit labour costs in industry
annual growth rate in %



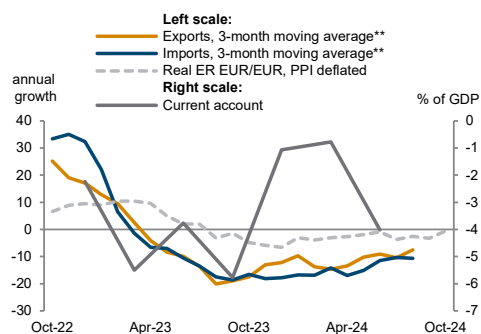
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

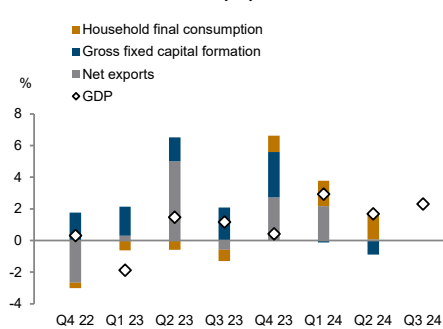
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

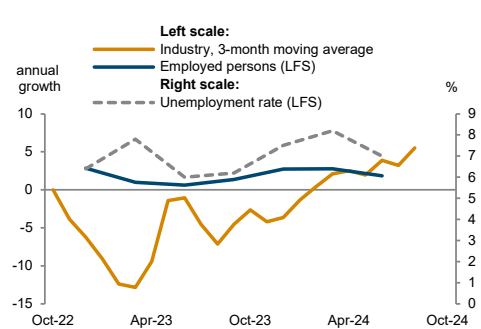
<https://data.wiiw.ac.at/monthly-database.html>

Lithuania

Real GDP growth and contributions



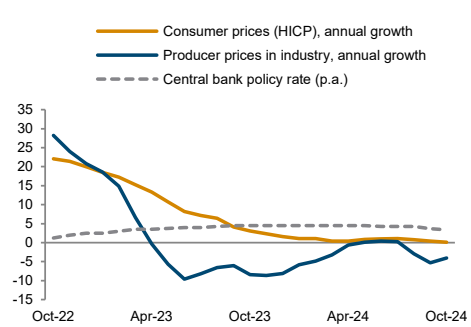
Real sector development



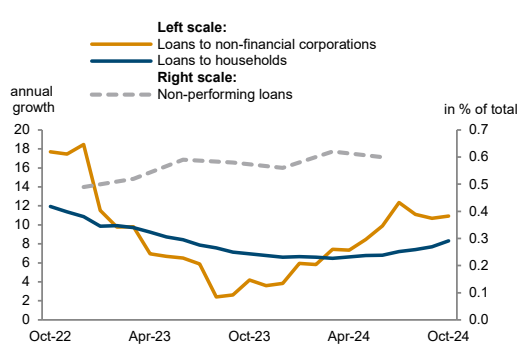
Unit labour costs in industry



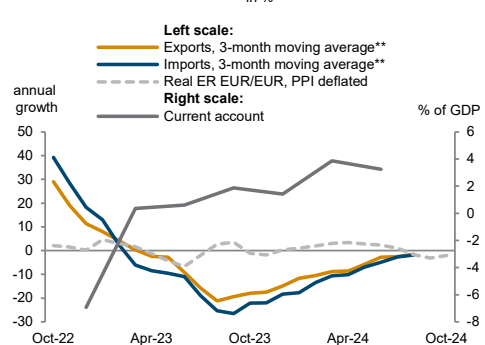
Inflation and policy rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

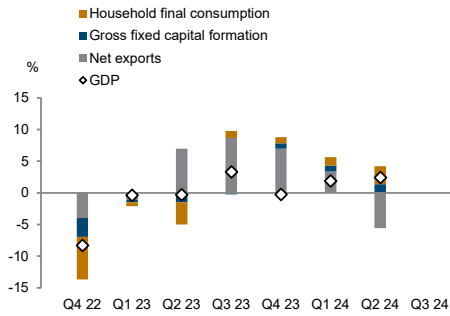
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

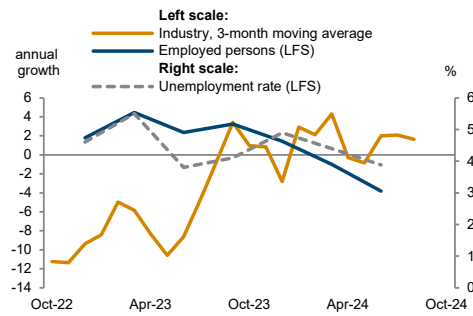
<https://data.wiiw.ac.at/monthly-database.html>

Moldova

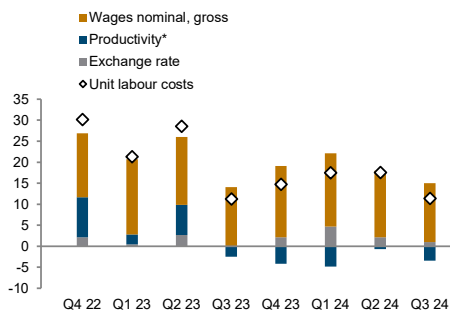
Real GDP growth and contributions
y-o-y



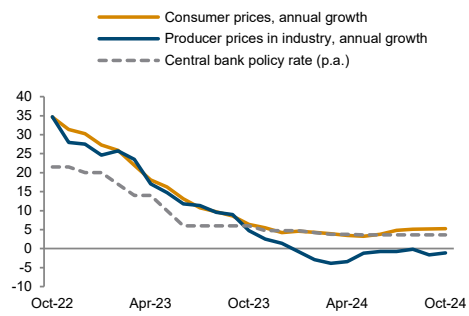
Real sector development
in %



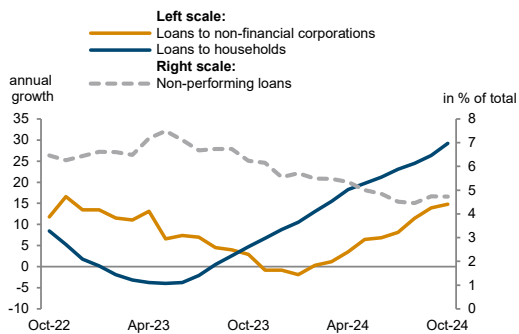
Unit labour costs in industry
annual growth rate in %



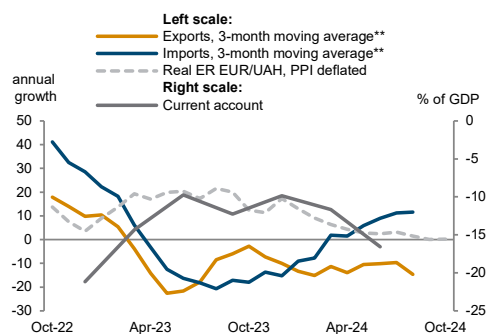
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

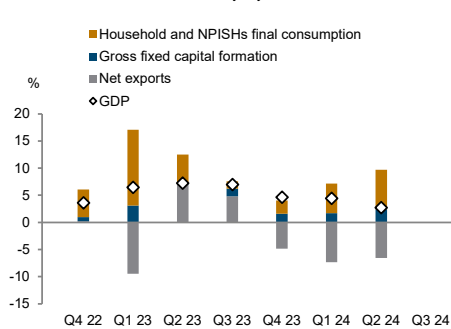
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

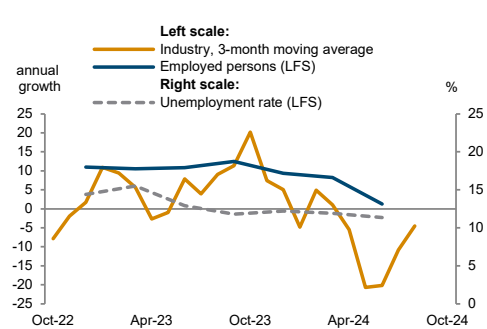
<https://data.wiiw.ac.at/monthly-database.html>

Montenegro

Real GDP growth and contributions



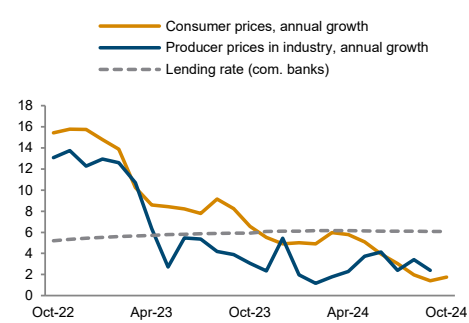
Real sector development



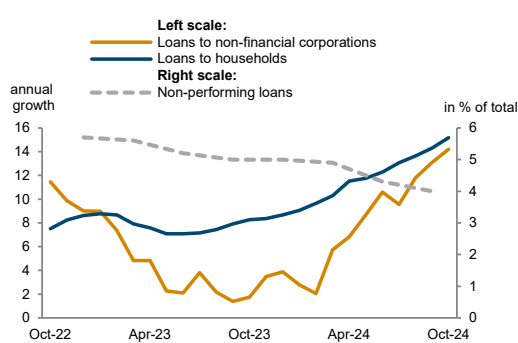
Unit labour costs in industry



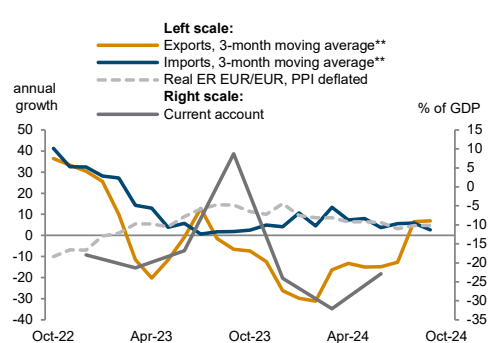
Inflation and lending rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

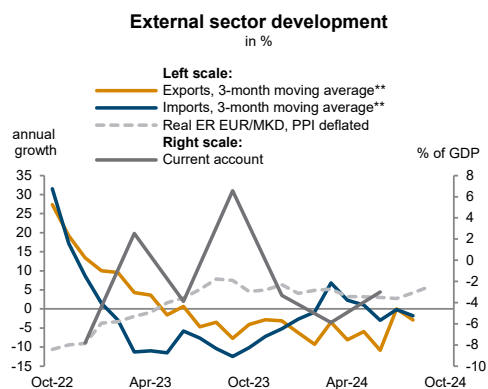
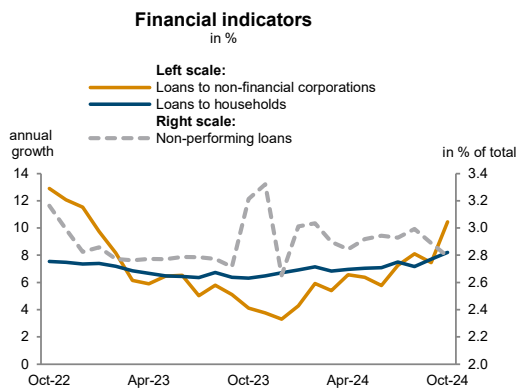
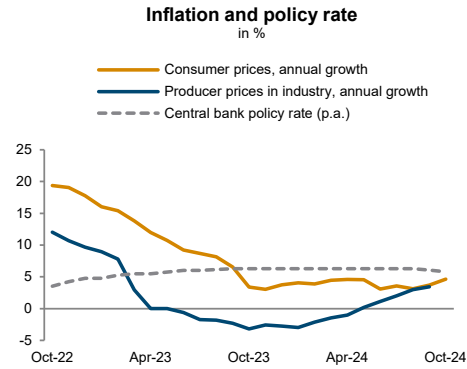
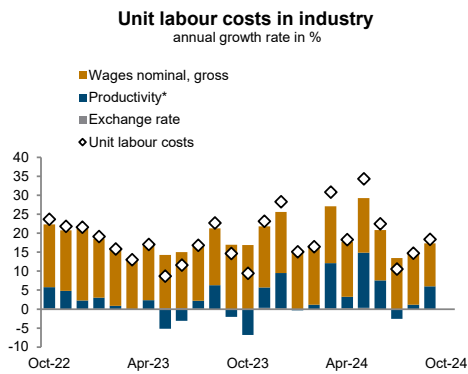
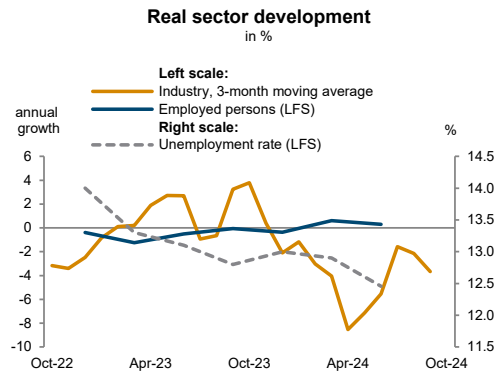
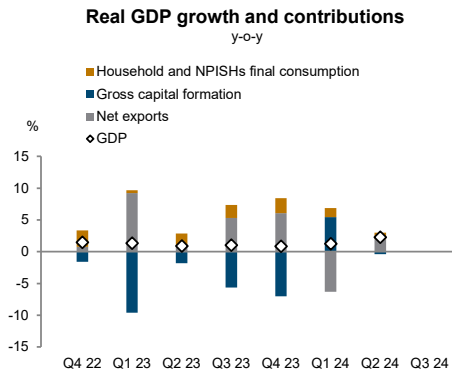
**EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

<https://data.wiiw.ac.at/monthly-database.html>

North Macedonia

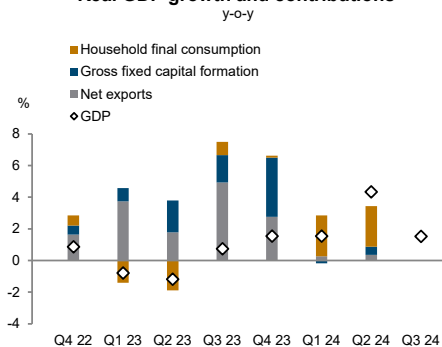


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

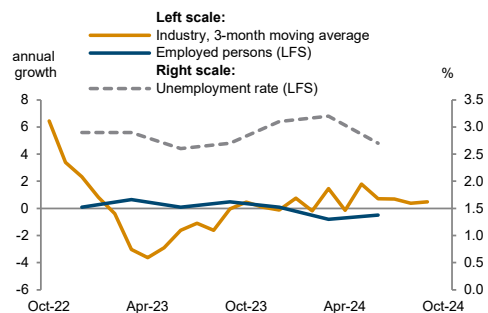
Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Poland

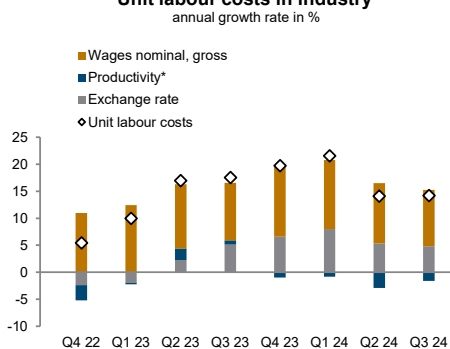
Real GDP growth and contributions



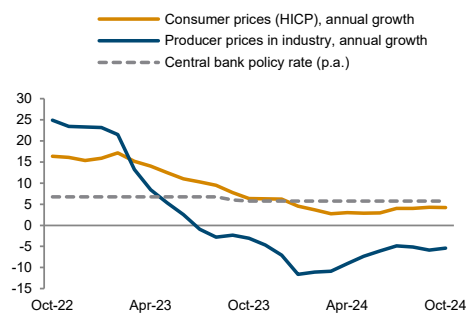
Real sector development



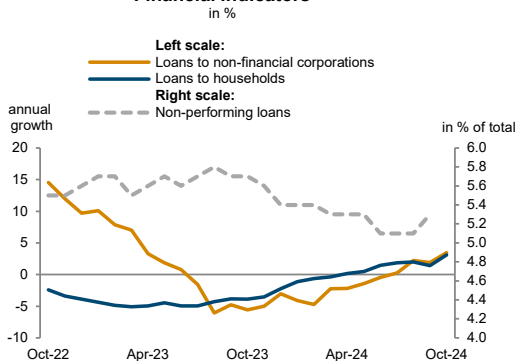
Unit labour costs in industry



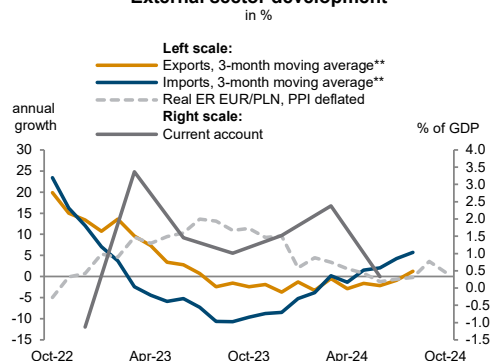
Inflation and policy rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

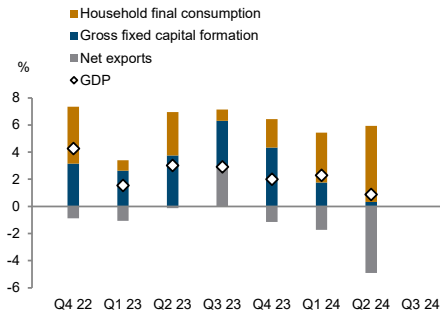
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

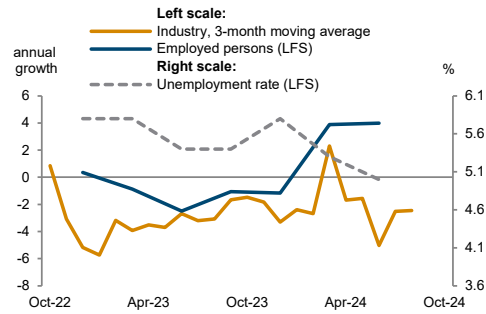
<https://data.wiiw.ac.at/monthly-database.html>

Romania

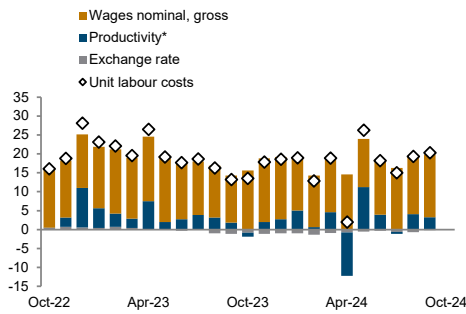
Real GDP growth and contributions
y-o-y



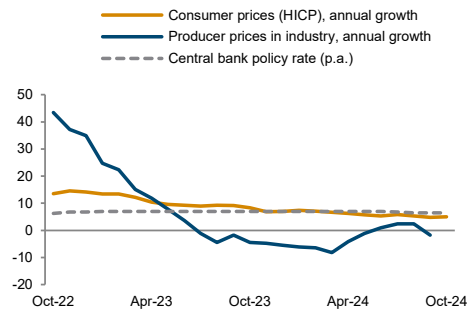
Real sector development
in %



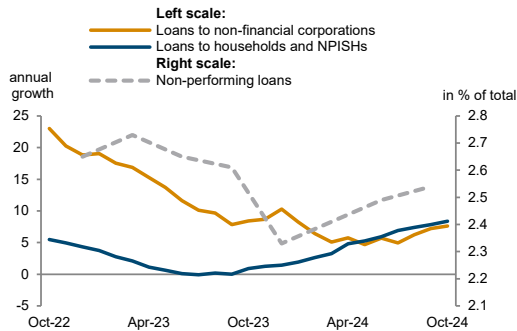
Unit labour costs in industry
annual growth rate in %



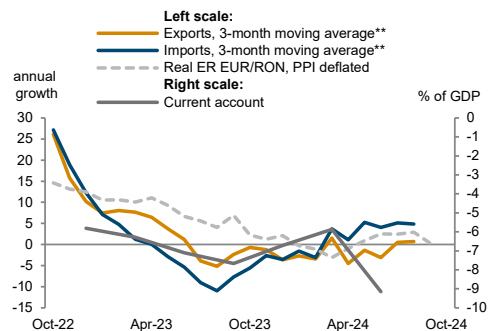
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

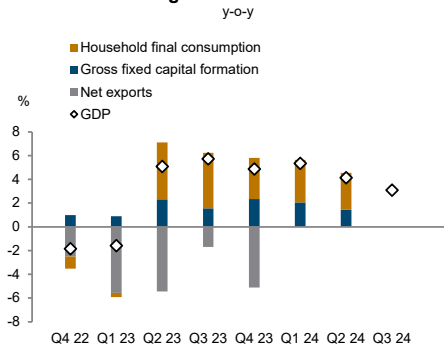
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

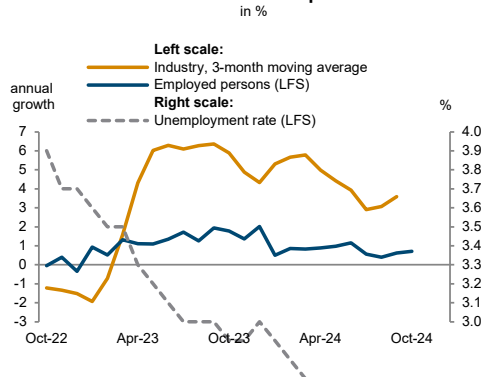
<https://data.wiiw.ac.at/monthly-database.html>

Russia

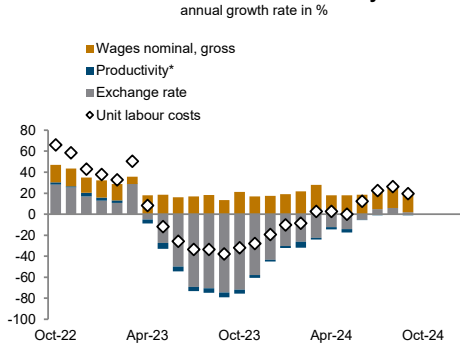
Real GDP growth and contributions



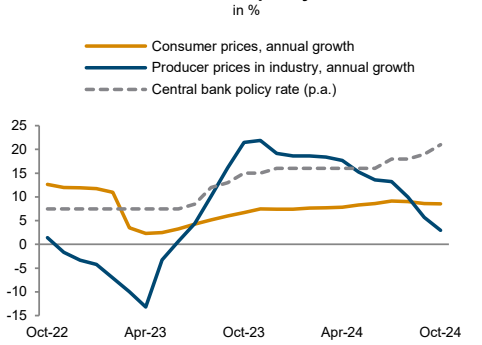
Real sector development



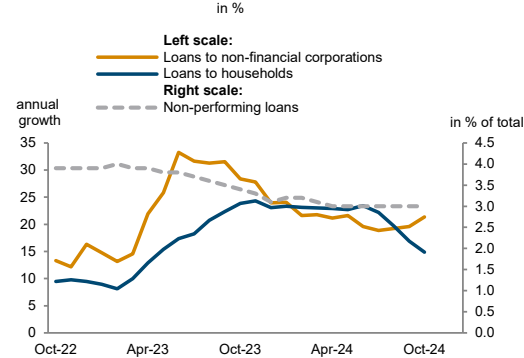
Unit labour costs in industry



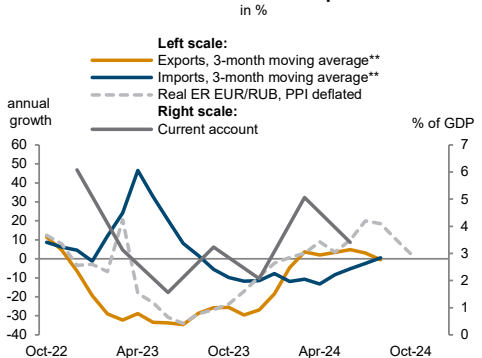
Inflation and policy rate



Financial indicators



External sector development

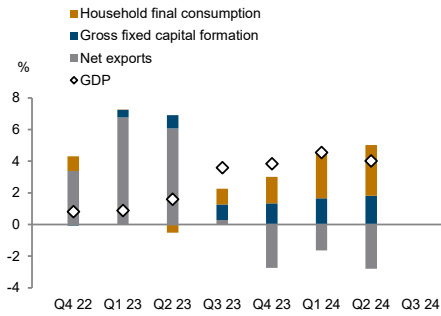


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

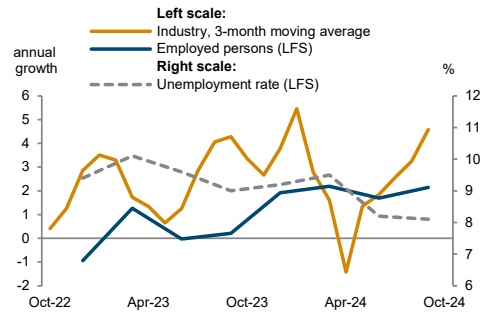
Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Serbia

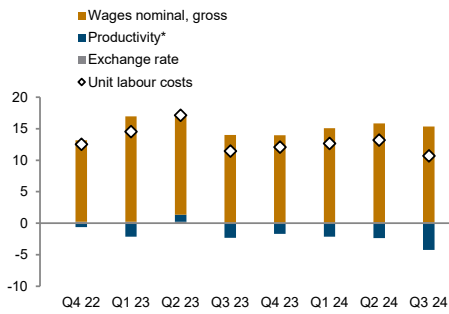
Real GDP growth and contributions
y-o-y



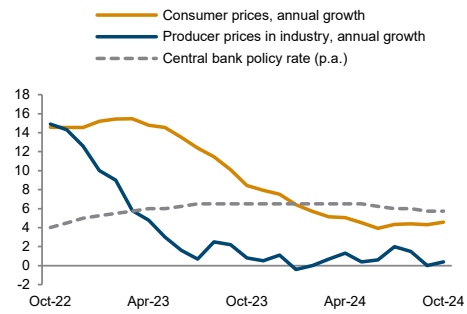
Real sector development
in %



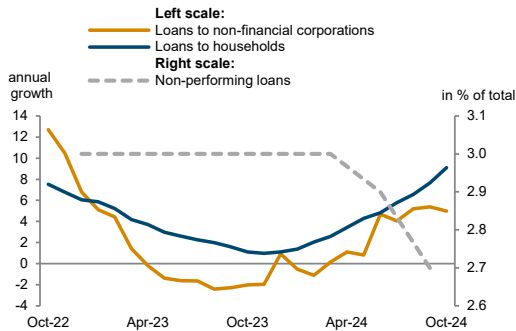
Unit labour costs in industry
annual growth rate in %



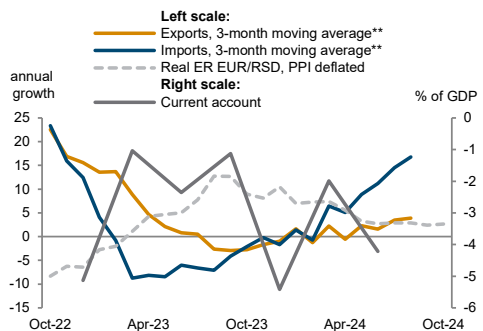
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

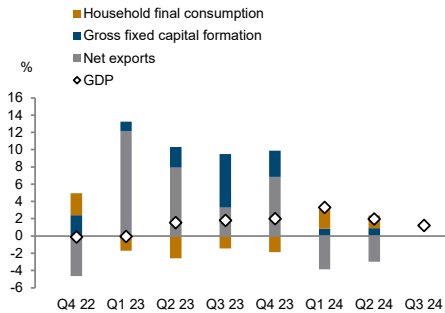
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

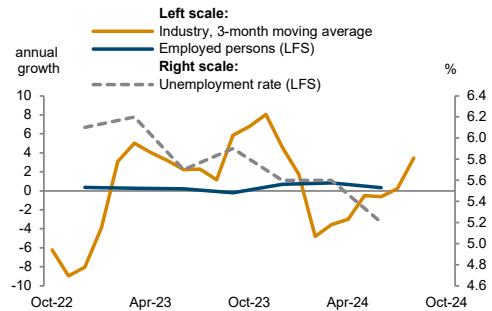
<https://data.wiiw.ac.at/monthly-database.html>

Slovakia

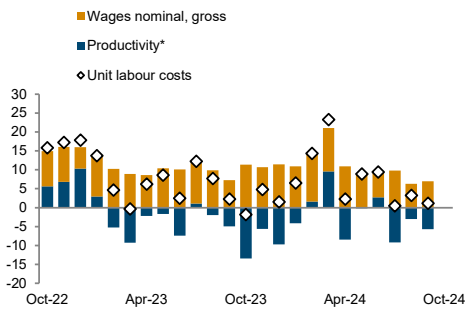
Real GDP growth and contributions
y-o-y



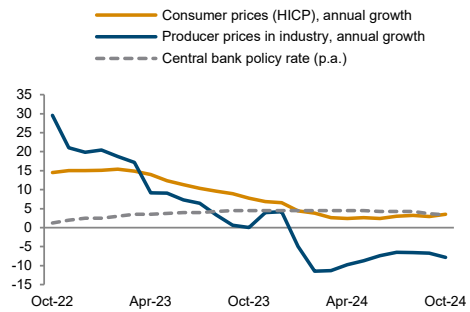
Real sector development
in %



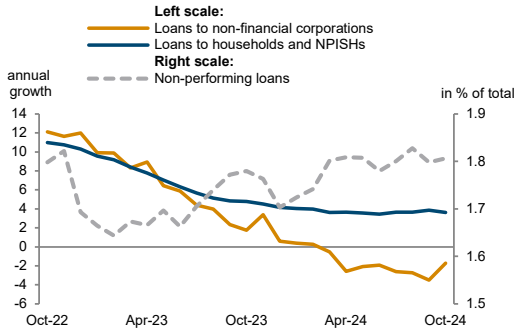
Unit labour costs in industry
annual growth rate in %



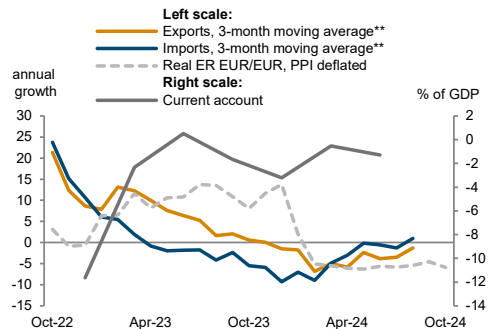
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %

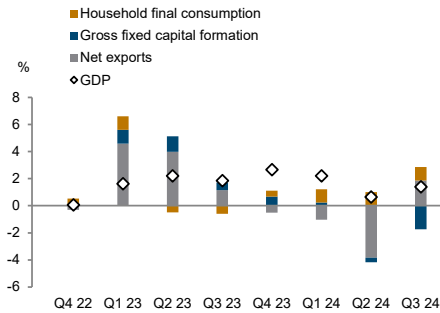


*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

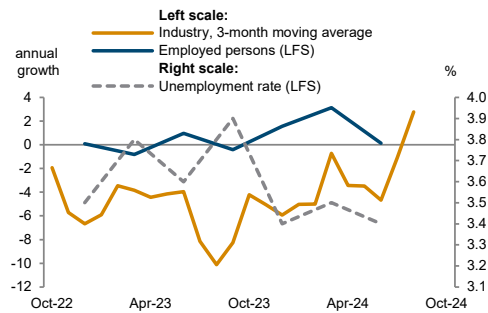
Source: wiiw Monthly Database incorporating Eurostat and national statistics.
Baseline data, country-specific definitions and methodological breaks in time series are available under:
<https://data.wiiw.ac.at/monthly-database.html>

Slovenia

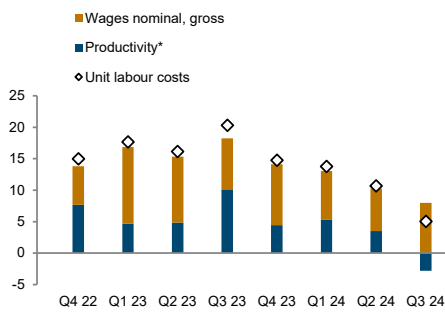
Real GDP growth and contributions
y-o-y



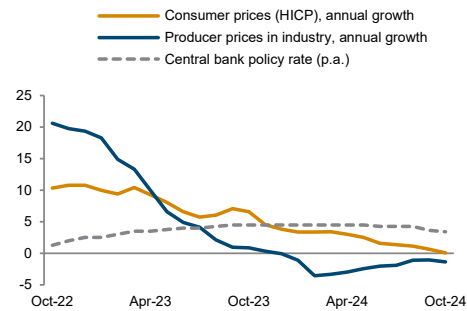
Real sector development
in %



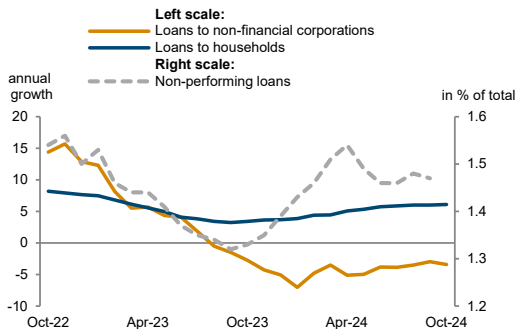
Unit labour costs in industry
annual growth rate in %



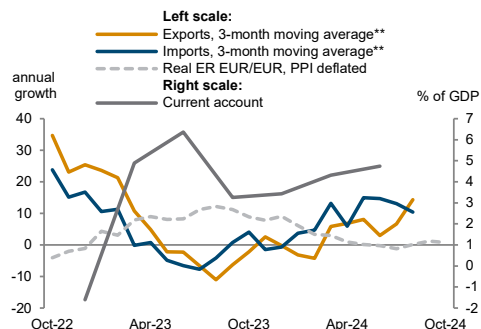
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.
**EUR based.

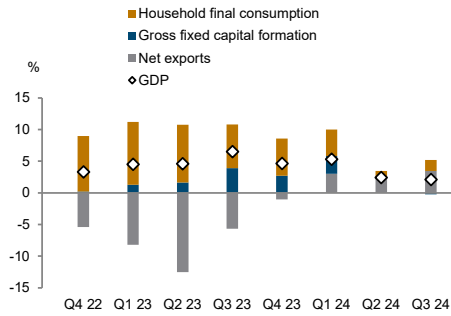
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

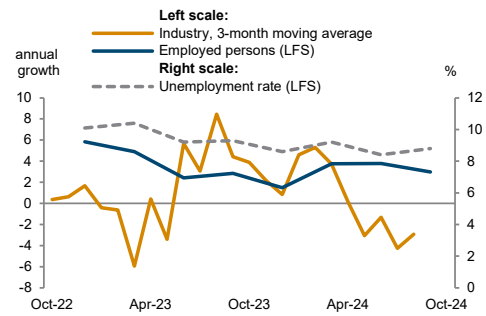
<https://data.wiiw.ac.at/monthly-database.html>

Turkey

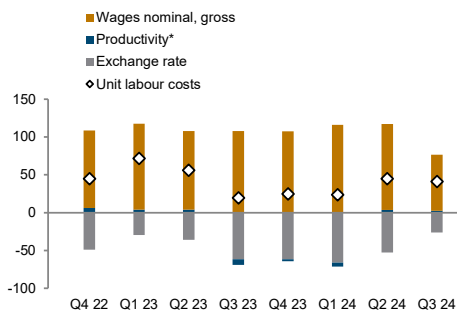
Real GDP growth and contributions
y-o-y



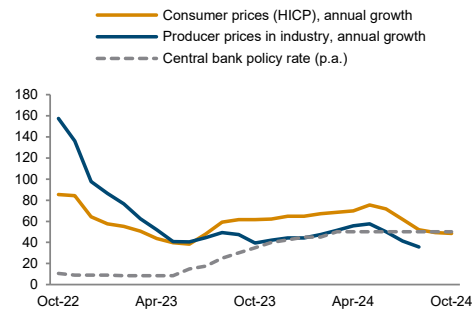
Real sector development
in %



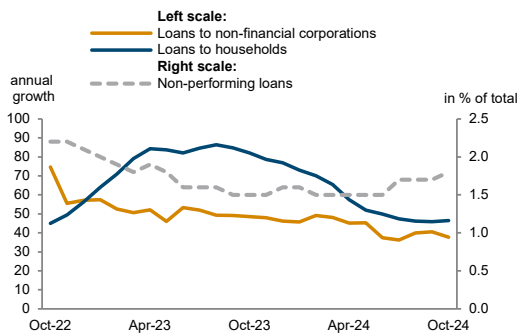
Unit labour costs in industry
annual growth rate in %



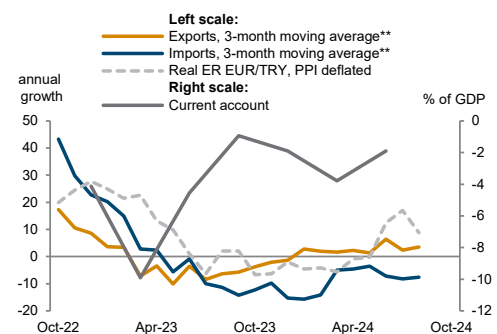
Inflation and policy rate
in %



Financial indicators
in %



External sector development
in %



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

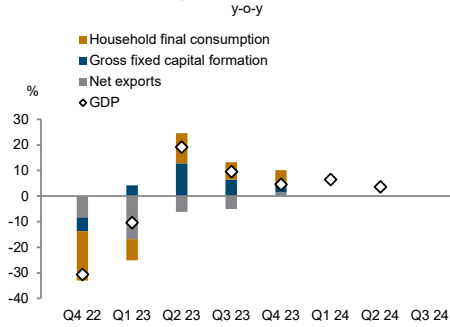
Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

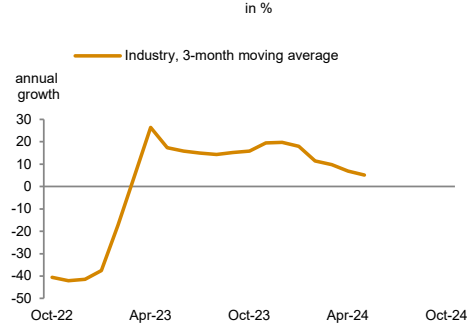
<https://data.wiiw.ac.at/monthly-database.html>

Ukraine

Real GDP growth and contributions



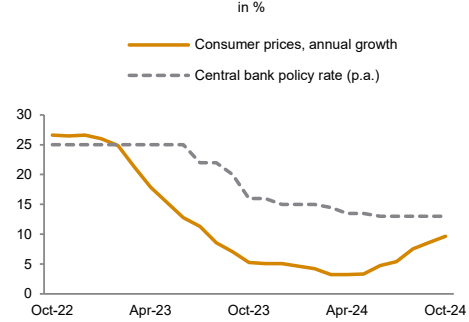
Real sector development



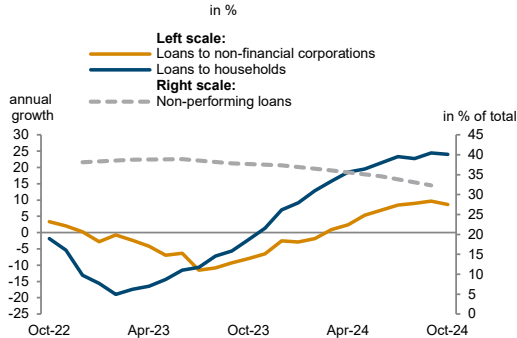
Wages in industry



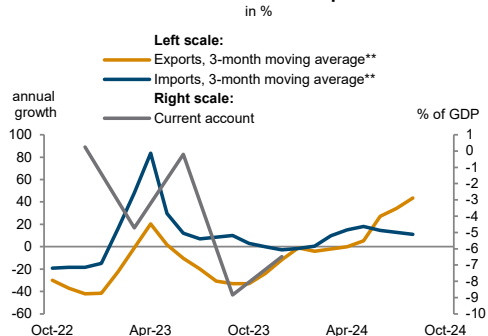
Inflation and policy rate



Financial indicators



External sector development



*Positive values of the productivity component on the graph reflect decline in productivity and vice versa.

**EUR based.

Source: wiiw Monthly Database incorporating Eurostat and national statistics.

Baseline data, country-specific definitions and methodological breaks in time series are available under:

<https://data.wiiw.ac.at/monthly-database.html>

Index of subjects – December 2023 to December 2024

Albania	economic situation	2024/1, 2024/7-8
Austria	economic relations with CESEE.....	2024/1, 2024/7-8
	impact of COVID-19 on labour market.....	2024/3
Belarus	economic situation	2024/1, 2024/7-8
Bosnia and Herzegovina	economic situation	2024/1, 2024/7-8
Bulgaria	economic situation	2024/1, 2024/7-8
Croatia	economic situation	2024/1, 2024/7-8
Czechia	economic situation	2024/1, 2024/7-8
Estonia	economic situation	2024/1, 2024/7-8
Hungary	economic situation	2024/1, 2024/7-8
	political risk and FDI.....	2024/11
Kazakhstan	economic situation	2024/1, 2024/7-8
Kosovo	economic situation	2024/1, 2024/7-8
Latvia	economic situation	2024/1, 2024/7-8
Lithuania	economic situation	2024/1, 2024/7-8
Moldova	economic situation	2024/1, 2024/7-8
Montenegro	economic situation	2024/1, 2024/7-8
North Macedonia	economic situation	2024/1, 2024/7-8
	inflation and poverty.....	2024/3
Poland	economic situation	2024/1, 2024/7-8
Romania	economic situation	2024/1, 2024/7-8
Russia	economic situation	2024/1, 2024/7-8
	war with Ukraine	2024/10
Serbia	economic situation	2024/1, 2024/7-8
Slovakia	economic situation	2024/1, 2024/7-8
Slovenia	economic situation	2024/1, 2024/7-8
Turkey	economic situation	2024/1, 2024/7-8
Ukraine	economic situation	2024/1, 2024/7-8
	war with Russia.....	2024/10

(continued on the next page)

**multi-country articles
and statistical overviews**

Bretton Woods and global stagnation	2024/9
carbon pricing: effects on investment and employment	2024/2
catering sector in Poland	2024/6
CESEE: current developments	2024/1, 2024/7-8
COMECON economies: brand new dataset	2024/12
COMECON economies: digitising old wiiw publications	2024/12
COMECON economies: reasons for collapse.....	2024/12
digital transition at work in the EU.....	2024/10
employment gaps in Europe and beyond	2023/12
employment in Europe: typical and atypical.....	2024/10
environmental problems and economics	2024/9
EU fiscal rules.....	2024/2
EU institutions: Franco-German proposal on reforms.....	2023/12
EU minimum wage directive	2023/12
EU-CEE: challenges and opportunities.....	2024/4
EU-CEE: demography, labour markets and social welfare	2024/4
EU-CEE: political developments	2024/4
EU-CEE: 20 years of EU membership.....	2024/4
FDI in CESEE: recent trends	2024/5, 2024/11
green investments	2024/2
inflation and real interest rates.....	2024/3
innovation and FDI in the EU	2024/6
innovation in climate mitigation technologies in the EU	2024/6
Western Balkans: labour taxation	2024/9

The *wiiw Monthly Report* summarises wiiw's major research topics and provides current statistics and analyses exclusively to subscribers to the wiiw Service Package. This information is for the subscribers' internal use only and may not be quoted except with the respective author's permission and express authorisation. Unless otherwise indicated, all authors are members of the Vienna Institute's research staff or research associates of wiiw.

Monthly and quarterly statistics for Central, East and Southeast Europe are compiled by the statistics department: Alexandra Bykova (coordination), Beata Borosak, Gentian Gashi, Nadja Heger, Monika Schwarzhappel, Galina Vasaros and David Zenz.

Economics editor: Vasily Astrov

IMPRESSUM

Herausgeber, Verleger, Eigentümer und Hersteller:
Verein „Wiener Institut für Internationale Wirtschaftsvergleiche“ (wiiw),
Wien 6, Rahlgasse 3

ZVR-Zahl: 329995655

Postanschrift: A 1060 Wien, Rahlgasse 3, Tel: [+431] 533 66 10, Telefax: [+431] 533 66 10 50
Internet Homepage: www.wiiw.ac.at

Nachdruck nur auszugsweise und mit genauer Quellenangabe gestattet.

Offenlegung nach § 25 Mediengesetz: Medieninhaber (Verleger): Verein "Wiener Institut für Internationale Wirtschaftsvergleiche", A 1060 Wien, Rahlgasse 3. Vereinszweck: Analyse der wirtschaftlichen Entwicklung der zentral- und osteuropäischen Länder sowie anderer Transformationswirtschaften sowohl mittels empirischer als auch theoretischer Studien und ihre Veröffentlichung; Erbringung von Beratungsleistungen für Regierungs- und Verwaltungsstellen, Firmen und Institutionen.

