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Deutsches Institut für Wirtschaftsforschung 2024

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IMPRESSUM

DIW Berlin, 2024

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https://www.diw.de

ISSN electronic edition 1619-4535

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The Women in Economics Index – Monitoring women economists' representation in leadership positions*

Jana Schuetz† Virginia Sondergeld‡ Insa Weilage§

March 26, 2024

Abstract

We contribute to the research on gender representation in economics by documenting the share of women among economists in a variety of leadership positions in the academic, but also in the private and public sectors, both globally and by region. For the years 2019 to 2023, we find women economists' representation overall to be low in all sectors and no clear-cut trends over time. In academia, we find women's representation to be highest in Africa and Oceania, an observation that previous studies could not show so far as they analysed global top departments and thus mechanically focused on North America and Europe. Also for the public sector, we highlight significant regional discrepancies.

JEL: A11, J16
Keywords: female representation, gender equality, women in economics

*We thank the research team members of The Women in Economics Initiative for their excellent work on the data collection. We thank participants of the Gender Gaps Conference Warsaw 2023 and the presentations of the yearly WiE Index report as well as Katharina Wrohlich and Ella Needler for their valuable feedback and comments. All data presented in this paper can be downloaded through Weilage, Insa; Sondergeld, Virginia; Schuetz, Jana, 2024, The Women in Economics Index - Monitoring women economists representation in leadership positions, https://doi.org/10.7910/DVN/YEZX3X, Harvard Dataverse. The views expressed in this publication are those of the authors and do not necessarily reflect the position of the DIW Berlin and CPB Netherlands Bureau for Economic Policy Analysis.

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1 Introduction

Diversity of perspectives leads to better outcomes in science and in business (see, e.g., Levine et al., 2014; Nielsen et al., 2017). One important dimension of diversity is gender diversity. In recent years, there has been a growing awareness of the importance of gender diversity and representation of women in also economics.[1]

Historically, women have been underrepresented in the field of economics. In its first annual survey in 1972, the Committee on the Status of Women in the Economics Profession of the American Economic Association (CSWEP) found a share of 6 % women among faculty and graduate students at US departments (CSWEP, 1972). Since then, representation of women in the profession has increased. However, it remains far from parity. Several recent studies have documented the persistent underrepresentation of women in the field (Auriol et al., 2022; Bateman et al., 2023; Lundberg, 2018). Further, a growing body of literature has evolved that seeks to identify the causes and consequences of this underrepresentation: for example, in the academic publication process, women economists are found to be held to higher standards (Card et al., 2020; Hengel, 2022). In tenure decisions, women economists receive less credit for publications coauthored with men (Sarsons et al., 2021). In economics job market reference letters women are more often described using grindstone terms and less often praised for their ability (Eberhardt et al., 2022). Further, gender differences in treatment in economics seminars has been documented with women being asked more questions and more often patronizing or hostile questions (Dupas et al., 2021).

So far, research on women's representation in economics has been exclusively focused on the academic sector, finding evidence of a "leaky pipeline", i.e., the share of women decreases by level of academic seniority (Auriol et al., 2022). It is observed that women drop out of academia but little is known about the career alternatives they pursue outside of academia. Economists enjoy a wide range of career opportunities in both the private and the public sector. In these roles, their economic knowledge and research can inform and guide policy and business decisions. So far, there have not been any systematic efforts to track women's representation among economists outside academia. However, information on women's representation in these positions of power is critical to evaluate in how far their interests and needs are represented in decision-making. Furthermore, insights on women economists' employment and diversity in these sectors may help to uncover reasons why women economists leave academia for

[1] We focus on gender in this study but stress that a growing discussion has also evolved related to lacking diversity in other dimensions such as race and sexual orientation.

other employment opportunities.

In this study we contribute to filling the gap in data on the representation of women economists[2] representation in all sectors where economists are employed and economic research is conducted or applied. Using data that we have collected for the yearly and continuing Women in Economics Index publication ("WiE Index") by The Women in Economics Initiative[3], we document the share of women economists in a variety of leadership positions in the academic, private, and public sectors globally. We focus on representation in leadership positions since these are the most powerful roles to affect important decision-making and since they provide role models for future generations. In addition to looking beyond academia and being the first to provide evidence on the private and public sectors, this study is also the first to analyse geographic variation in women's representation in economics by explicitly considering all regions of the world separately. This is relevant because existing studies and data collections survey women economists' representation in the global top academic institutions. However, global top institutions and research output are highly concentrated in North America and Europe, plus a few institutions in Oceania. Thus, this kind of sampling mechanically excludes other world regions from the analysis of women's representation. We believe it is important to investigate all regions of the world: gender diversity in leadership roles can influence important policy decisions at the regional and country-level in all parts of the world and role models are particularly important if they are accessible to younger researchers also in terms of geographical proximity.

The remainder of this study is structured as follows. Section 2 describes the data and results for the academic sector, section 3 does so for the private sector and section 4 for the public sector before section 5 concludes.

2 Academic Sector

Economic research conducted in the academic sector plays a critical role in shaping the field of economics. Inclusion of women increases the diversity of perspectives in academic discourse and on how key economic concepts are understood and applied in a wider societal context. Further, the presence of women economists in leadership

[2] For this study we identify the gender of a person using their first name, their pronouns and their photo from institution or personal websites whenever available. Following this methodology, we so far have not identified non-binary persons in the sample. Therefore for the rest of the report we use a binary gender classification of "women" and "men". However, our understanding of gender diversity includes people who do not fall into this binary classification and we are aware that there may be such persons in our sample that we were unable to detect from the available information.

[3] https://www.women-in-economics.com/index/

positions ensures that there are role models for younger generations to look up to. The WiE Index for the academic sector is composed of three indicators - the share of women among the top 100 authors of economic literature, the share of women in leadership roles in the top 25 % economics think tanks and the share of women among the faculty members of the top 25 economics departments. These indicators together provide a holistic view on women economists' representation in key academic institutions and their share in contributions to academic research.

2.1 Women as top authors of economic literature

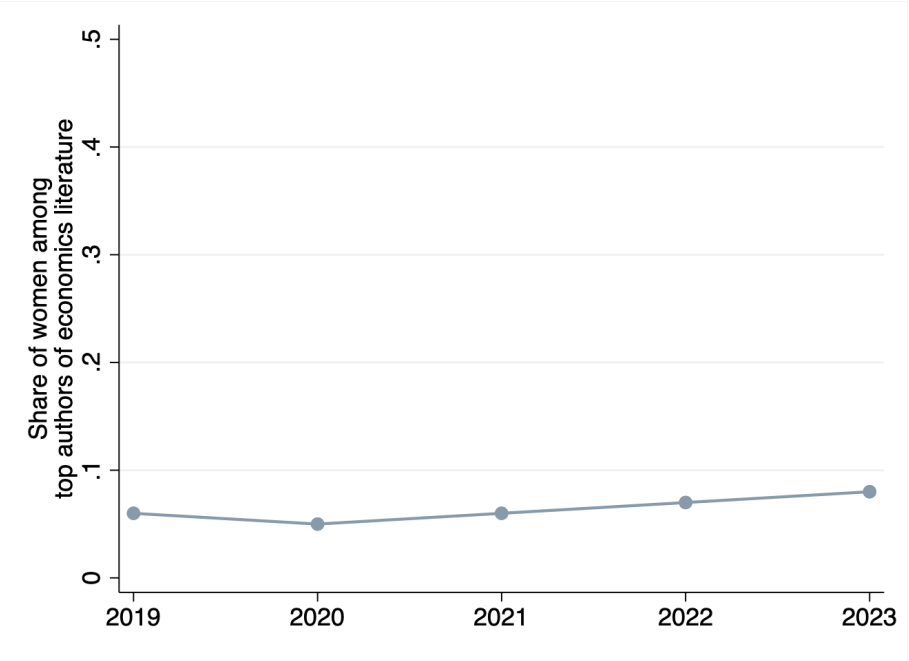
The first indicator of the WiE Index for the academic sector considers the share of women authors among the top 100 of the IDEAS/RePEc ranking (IDEAS, 2023a) of the last ten publication years. This list ranks registered economists according to the harmonic mean of their respective ranking in over 30 citation measures, powered by the CitEc (2023) project. In this way, the share of women among top authors of economic literature approximates their contribution to research in economics considering the size of their research output and its influence on the field.

The IDEAS/RePEc ranking is updated several times per year. Since the WiE Index is published annually, we refer to the rankings as of May, June or July of the respective year. The RePEc database of authors is not a complete sample of all academic economists in the world, but it is the most complete effort at such an overview to our knowledge. In line with our focus on the leading figures of the profession, we restrict our analysis to the top 100 authors considering the last 10 years of publications and calculate the share of women among them.

Overall, we see very little movement in the share of women among the top 100 authors over time (Figure 1). After a slight decrease from 6 percent in 2019 to 5 percent in 2020, the share has increased by 1 percentage point per year and stood at 8 percent in 2023.[4]

[4] Table A-1 shows the underlying observation numbers for each authors ranking by year.

Figure 1: Share of women among top 100 authors of the IDEAS/RePec ranking considering the last 10 years of publications

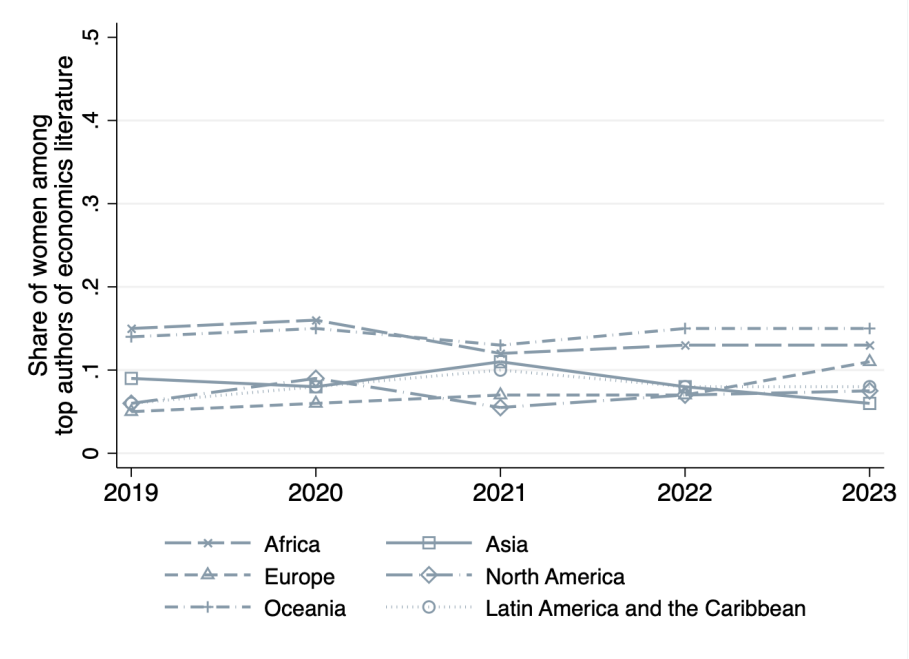


Regional analysis of women as top authors of economic literature

We investigate the share of women among top authors for the regions Africa, Asia, Oceania, Europe and Latin America and the Caribbean provided by IDEAS/RePec (Figure 2). For North America, we calculate the average of the rankings for the United States and Canada. Overall, the share of women among top authors is low in all, however, with some regional variation. The highest shares can be found in Oceania (15 % in 2023) and Africa (13 % in 2023).[5]

[5] Table A-1 shows the underlying observation numbers for each regional authors ranking by year.

Figure 2: Share of women among top authors of the IDEAS/RePec ranking by region



2.2 Women as faculty members of top economics departments

Higher education institutions hold a unique position in society to impact gender equality through the research they undertake, their curriculum and the presence of a diverse faculty who can be role models for the next generation. Therefore, we investigate women's presence amongst the faculties of top economics departments in the world. To calculate this share, we collect university rankings data from the yearly QS World University Ranking (see QS Quacquarelli Symonds Limited, 2023). Based on the list of top economics departments taken from this public database, we collect faculty data from each of the individual university websites. The data set contains information on all faculty members, including lecturers, fellows and postdoctoral scholars in the economics department. We exclude adjunct and affiliated faculty as well as individuals who have not yet obtained a doctoral degree.

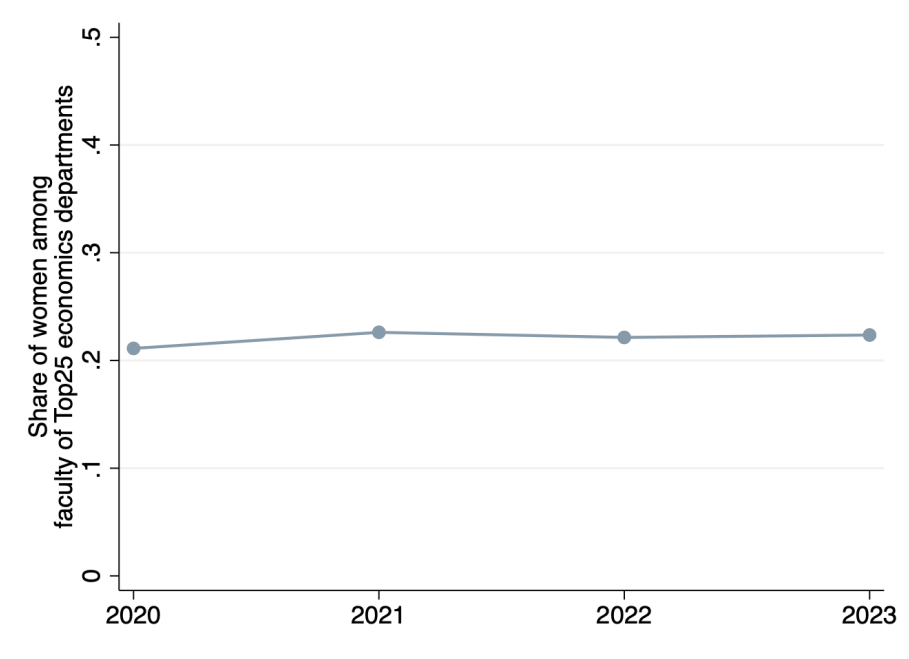
The data collection for top economics departments for the WiE Index was substantially expanded in the year 2020 moving from considering only the top 10 global departments to the top 25. Therefore, comparison over time for the top 25 departments is only possible for the years 2020 to 2023.[6]

The share of women among faculty members at the world's top economics depart-

[6] The data collected for the top 10 departments in 2019, however, is available in the data set and a comparison of the top 10 departments over the time period 2019 to 2023 can be done.

ments hovers around 22 % since 2021.[7]

Figure 3: Women's share among faculty members of the world's top economics departments



Regional analysis of women as faculty members of top economics departments

We calculate the share of women among faculty of the top 5 departments for the regions Asia, Oceania, Europe, North America, Latin America and Africa as listed in the QS World University Ranking.[8] Notably, the share of women among faculty of top departments is highest in Africa at 50 % in 2023. The substantial increase we see for Africa from 33 % in 2022 to 47 % in 2021 and 2022, however, is driven by a compositional change in the data available for African departments.[9] Women's representation is lowest in North America at approximately 19 % in 2023. The relatively low share in the North America, where most of the globally highest ranking institutions are based, is consistent with the finding of a lower share of women at institutions with the highest research output from Auriol et al. (2022). The share of women among faculty of top departments is a few percentage points higher and slightly increasing in Europe (27 % in 2023) and

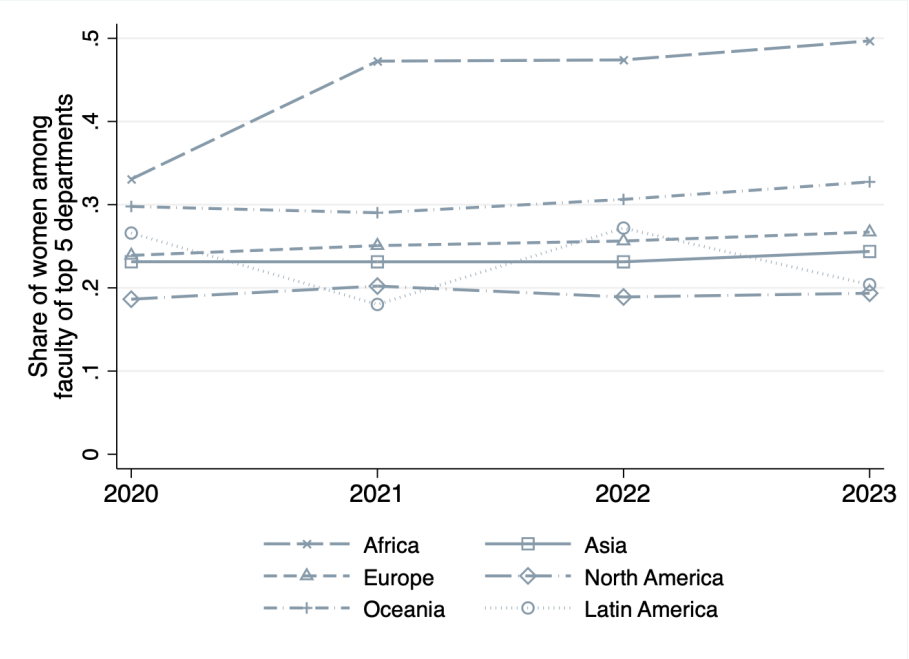
[7] Table A-2 shows the underlying observation numbers for faculty members of the top economics departments

[8] Table A-2 shows the underlying observation numbers for faculty members of the regional top economics departments

[9] For the University of Cairo, that has an exceptionally high share of women among economics faculty, there was no data available in 2020. The website of the university was unavailable at the time of data collection. Therefore, in 2020 the sample for Africa included only four departments. From 2021 onwards the University of Cairo was included in the sample.

in Asia (24 % in 2023). In Oceania, women's representation in top departments has reached 33 % in 2023. In Latin America the share of women among top departments fluctuates over the years between 18 % and 27 %. This development is due to a compositional change of the top 5 departments.[10]

Figure 4: Women's share among faculty members of top economics departments by region



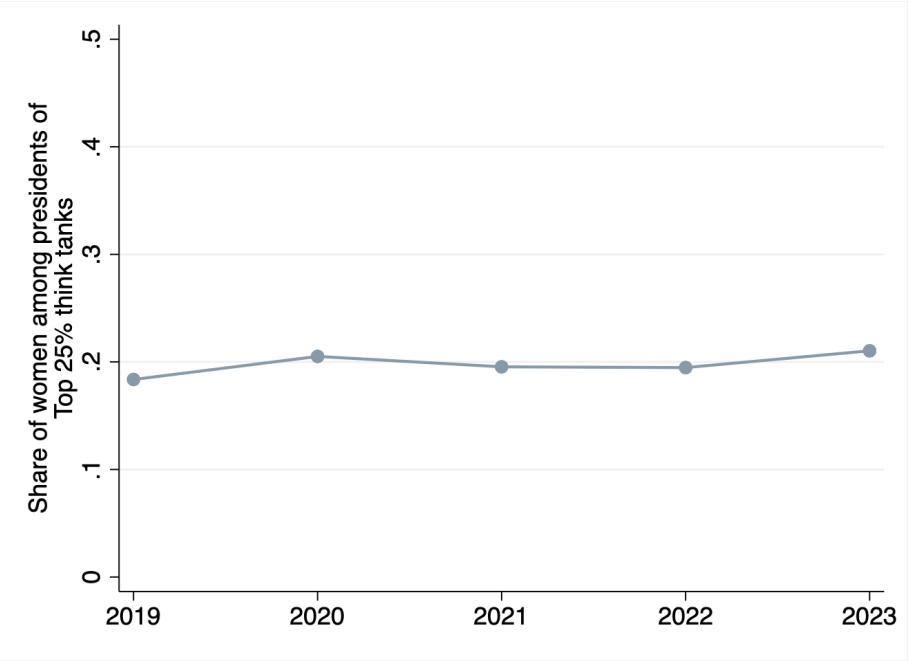
2.3 Women as leaders of top economics think tanks

The third indicator of the WiE Index for the academic sector considers the share of women leaders of economics think tanks. We look at all think tanks listed in the ranking "Top 25 % Think Tanks, all authors, all publication years" by IDEAS/RePEc.[11] Economics think tanks are important institutions for economic research and large employers of economists. They advise governments, public and private sector institutions, and communicate scientific findings to the general public. We calculate the share of women in the most senior position, such as director or president. We collect this information from public sources, including the websites of think tanks, press releases, and media reports. Each think tank counts equally even when it has several leading positions. Where there is mixed co-leadership, we weight each person by the number of leaders (e.g., 1/2 if there are two highest positions).

[10] The National Autonomous University of Mexico (UNAM) with a relatively high share of women was part of the top 5 in 2020 and 2022, but not in 2021 and 2023.
[11] See IDEAS, 2023b.

We find the (weighted) share of women among leaders of economic think tanks to fluctuate around 20 % without a clear trend over time (Figure 5). In 2023, the share stood at 21 %.[12] Since RePEc does not provide rankings of think tanks by region, we do not perform a regional analysis for think tanks.

Figure 5: Women's share among leaders of top economics think tanks



[12] Table A-3 shows the underlying observation numbers for leaders of economic think tanks by year.

3 Private Sector

Activity in the private sector accounts for a major share of GDP in most economies. As with other roles, when women hold top positions in the private sector they can use their position of power to incorporate the needs and interests of women into decision-making processes. Economists work in various positions in the private sector such as in large industry corporations, banks, insurances or consulting firms where they use principles from economic theory as well as empirical methods to inform business decisions. Even though private companies are important employers of economists, little is known about women economists' representation in the sector. This may be due to poor data availability for researchers, while companies themselves may focus on tracking gender balance at the organisational level and not the occupational level. To our knowledge, the WiE Index is the first study to measure women economists' representation in the private sector.

The WiE Index for the private sector is composed of three indicators – the share of women chief economists of the largest companies worldwide, as well as the share of women chief economists of banks and insurance companies. We put an explicit focus on banks and insurance companies because they typically employ a great share of economists.

We use the Fortune Global 500 list (Fortune Media, 2023), which identifies the largest companies in the world in terms of revenue, as the basis for our analysis.[13] It is updated yearly and usually published in August, which makes it well suited for a time series analysis. Specifically, we review the top 100 companies listed in the Fortune Global 500 ranking. Because banks and insurance companies are prominent employers of economists, we include all banks and insurance companies included in the Fortune Global 500 into our ranking separately. Therefore, a company can appear in more than one indicator (e.g., a large bank in the top 100 companies will be included in the bank indicator as well).

We identify chief economists by reviewing websites, press releases, and news articles. In our data collection process, we encounter two main difficulties. First, not all companies in our sample have a chief economist. This appears to be the case for many

[13] In 2019, we used a slightly different source for our data. We looked at the 30 largest companies from the Fortune Global 500 list (instead of the top 100). For the banking sector, the S&P Global Market Intelligence ranking was used to identify the largest 100 banks in terms of revenue. The insurance sector was covered by the top 100 insurance firms in terms of revenue by Statista. Although the sources changed from 2020 onward, the list of banks and insurances that were ultimately sampled barely changed. We thus include 2019 in our time series.

companies based in Asia, where we often find one board of directors/executives and individual titles are not (publicly) assigned. Second, few companies publicly share their chief economist's identity.[14]

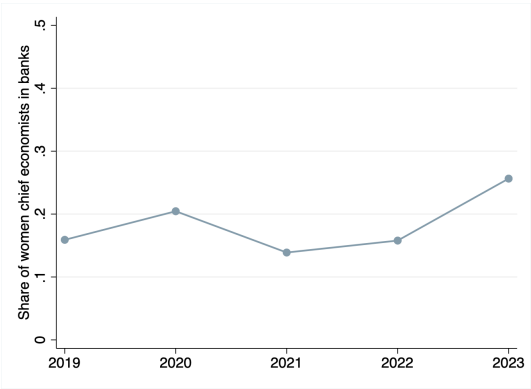
3.1 Women as chief economists in private sector companies

Figure 6 shows the share of women economists in the banking sector, the insurance sector, and the Fortune Global Top 100 companies.[15] Between 2019 and 2022 the share of women economists is highest among the top 100 companies, followed by banks and insurance companies. The shares fluctuate between 9 % and 26 %, without any discernible trend. In 2023 banks and top 100 companies feature an equal share of female chief economists with 25.6 % (10 out of 39 chief economists identified for banks and 11 out of 43 chief economists identified for the top 100 companies).

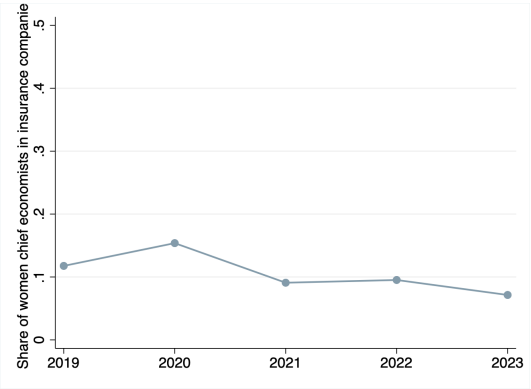
[14] In the years 2019 to 2022 we also contacted firms directly via e-mail or contact forms to learn about their chief economist or confirm our information. However, most firms did not reply to our requests for information or declined to answer our inquiries about their chief economists. Because this procedure was also very labor intensive, we discontinued it in 2023.

[15] The underlying observation numbers by year, sector, and gender can be found in table A-4. Differences to the previously published data are due to additional data points that have been uncovered since and a few corrections.

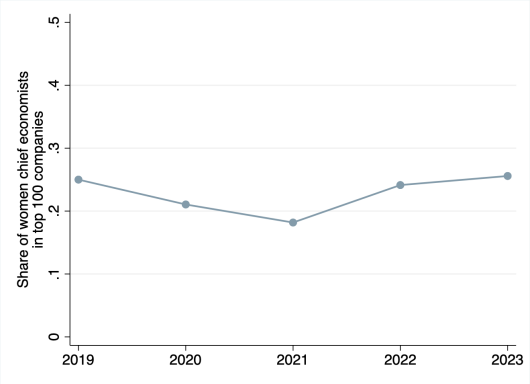
Figure 6: Share of women chief economists in the private sector



(a) Banks



(b) Insurance companies



(c) Top 100

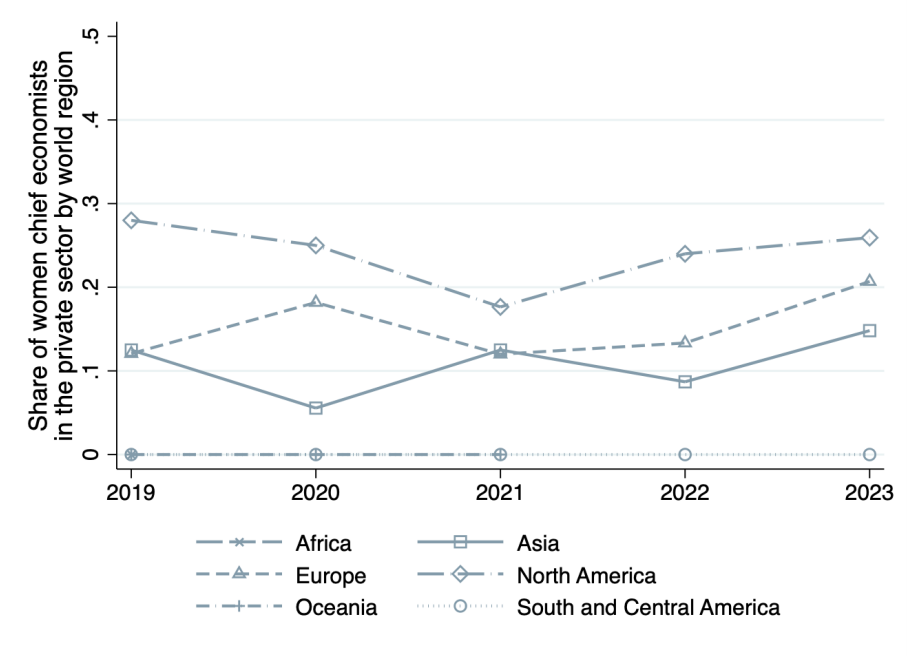
Regional analysis of women as chief economists in private companies

In order to investigate regional diversity, we group the companies according to the location of their headquarters. First, this allows us to see variation in women's representation across regions. Second, this approach also provides insights into which regions are home to the most economically powerful firms that shape the public perception of (women) chief economists.

The Global Top 100 ranking captures the largest companies in terms of revenue, independent of their location. However, because the Global North still is economically more powerful than its population size would suggest, a sizeable share of the companies in the ranking have their headquarters in North America or Europe. The share of Asian (and esp. Chinese) companies is increasing as well, mirroring the strong economic development of Asia in the last decades. Because of this regional imbalance, it can be informative to look at other world regions for a broader perspective.

Figure 7 plots the share of female chief economists by world region over time.[16] Two things stand out. First, for Africa, Oceania and South and Central America, we do not observe a single female chief economist in our observation period. However, there are few observations for these regions, so this finding should be taken with caution and does not necessarily imply that gender equality in the private sector is worse here than in the other regions. Rather, it should illustrate that these regions are not very well represented in our data set. For Africa and South and Central America, this may be due to their historically slower economic development. For Oceania, which includes highly developed Australia and New Zealand, its overall small population of less than 50 million makes it plausible to observe very few large companies here. Second, the shares for the remaining world regions – Asia, Europe, and North America – fluctuate between 9 % and 29 % without a discernible trend. It is unfortunate that low observation numbers prevent us from getting a more precise estimate of the actual share. Nevertheless, what becomes clear is that the observed numbers are far below gender parity. Thus, even though we do not have a clear picture of the development within the different world regions, we are confident in pointing out that there is still a lot that needs to happen to increase gender equality.

Figure 7: Share of female chief economists by region



[16] Table A-5 shows the underlying observation numbers. We combine all three indicators (banks, insurance companies, top 100 companies) in the regional analysis to obtain larger observation numbers.

4 Public Sector

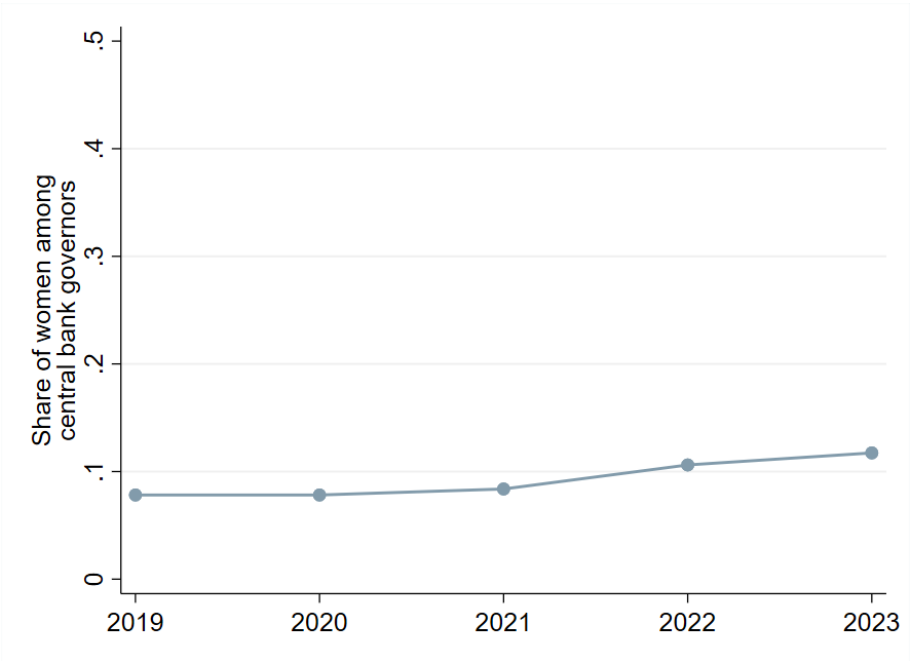
The public sector includes a variety of institutions where economists are employed and economic research is conducted or applied. We calculate the WiE index for the public sector based on four individual indicators: the share of women among governors of central banks, among finance ministers, as members of national economic advisory councils as well as chief economists at international institutions. We focus on these four measures as they capture a wide range of tasks related to economics and economic policy in the public sector. While governors of central banks are responsible for monetary policy, finance ministers are in charge of a country's fiscal policy. Economic advisory councils usually employ a diverse group of economic experts to advise policy makers and represent the interests of different economic and/or societal agents such as corporations or workers. Last but not least, we also include international institutions, which are major players in advising on and shaping economic policies beyond the national level.

4.1 Women as governors of central banks

The first indicator for the public sector is the share of women as central bank governors, who are usually responsible for monetary policy. The role of central bank economists includes macroeconomic research, advice for policy makers, and in some countries they also oversee the banking system. As a result, central banks tend to have a high proportion of economists on their staff. This means that central bank governors not only have a major impact on economic policy but also on the careers of many economists and function as a role model for early career economists. As an overview for central banks in countries around the world, we use a list provided by the Bank for International Settlements (2023) that lists 179 central banks, including groupings of more centralised banks, such as the European Central Bank (ECB) and the central bank of the Organisation of Eastern Caribbean States. In some cases, a central bank, such as the Bank of Central African States, is responsible for several countries. In these cases, a governor is counted once per country and may therefore appear several times in one year.

Figure 8 shows the development of the share of women as governors of central banks from 2019 to 2023. We find that the share of women as central bank governors is very small but slowly increasing over time. While the share was around 8 % in 2019 (14 female governors) it increased to 12 % by 2023 (21 female governors). Even though this is only a small increase, we view this as a first step towards more gender equity in leading positions of central banks.

Figure 8: Share of women among central bank governors



Regional analysis of women as governors of central banks

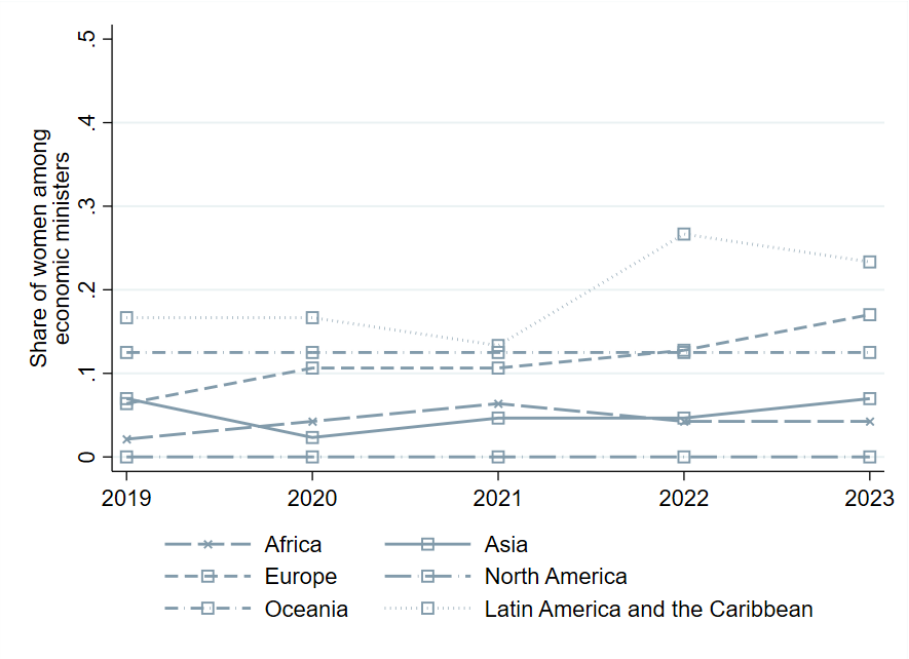
We additionally shed light on regional differences regarding gender equality among central bank governors. Figure 9 shows the share of women among central bank governors for the individual regions. The figure indicates that the share of women differs a lot across regions. It is lowest for North America where we have not observed a single woman as central bank governor (of the three possible) since the start of our data collection. In contrast, the share is highest for Latin America and the Caribbean where we observe a share of women around 23 % in 2023. While we do not observe a clear trend for Oceania, Asia, and Africa, for Europe we find that the share of women among central bank governors has increased since we started our data collection.[17]

4.2 Women as ministers of finance

The second indicator for the public sector is women as finance ministers. By overseeing a country's fiscal household, finance ministers are involved in various types of economic policy making, including taxation or the design of the social security system. In that way their decisions affect economic activity and outcomes over the business cycle and long-run economic trends. To analyse the share of women among ministers of finance

[17] See Table A-7 for more details.

Figure 9: Share of women among central bank governors by region



we examine government cabinets of all countries of the world and identify their finance ministers. If the cabinet title does not allow for clear identification of the finance minister, we analyse the position-specific tasks for each position and pick the person and position in charge of public finances.

Figure 10 shows the share of women among finance ministers. While the share in 2019 was at around 12 %, it has increased to around 16 % in 2023.

Regional analysis of women as finance ministers

Again, we are also interested in regional shares of women among finance ministers. The shares per region are displayed in Figure 11. The share seems to be rather stable or slightly increasing for most regions. For Latin America and the Caribbean, however, we observe a decrease in the share from around 27 % to about 13 %, four out of 30 finance ministers in this region in 2023 were women. For North America on the other hand we observe an increase to around 67 % in 2021. Two out of the three finance ministers in North America were and still are women in 2023. We provide more details in Table A-6.

Figure 10: Share of women among finance ministers

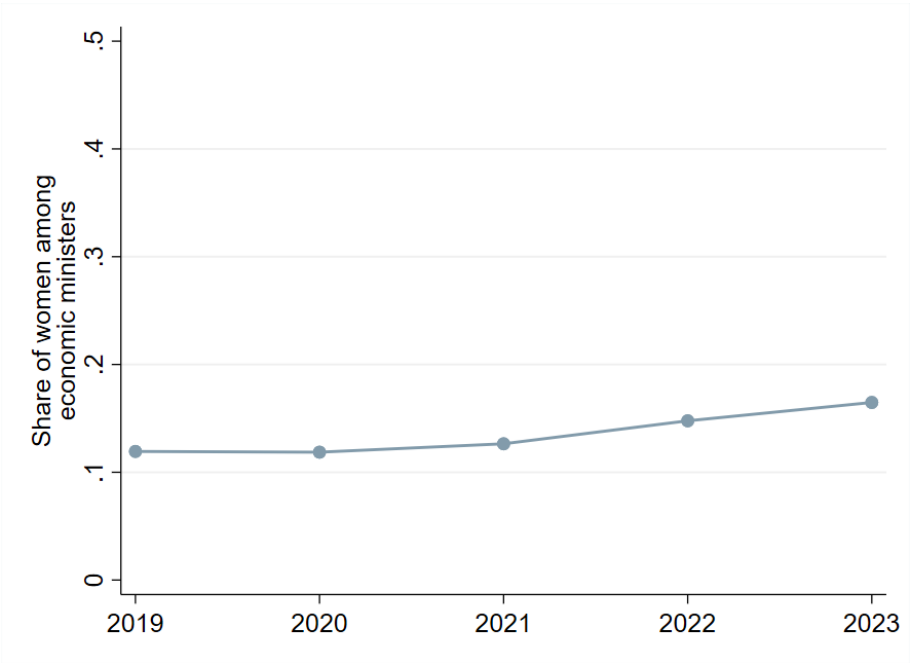
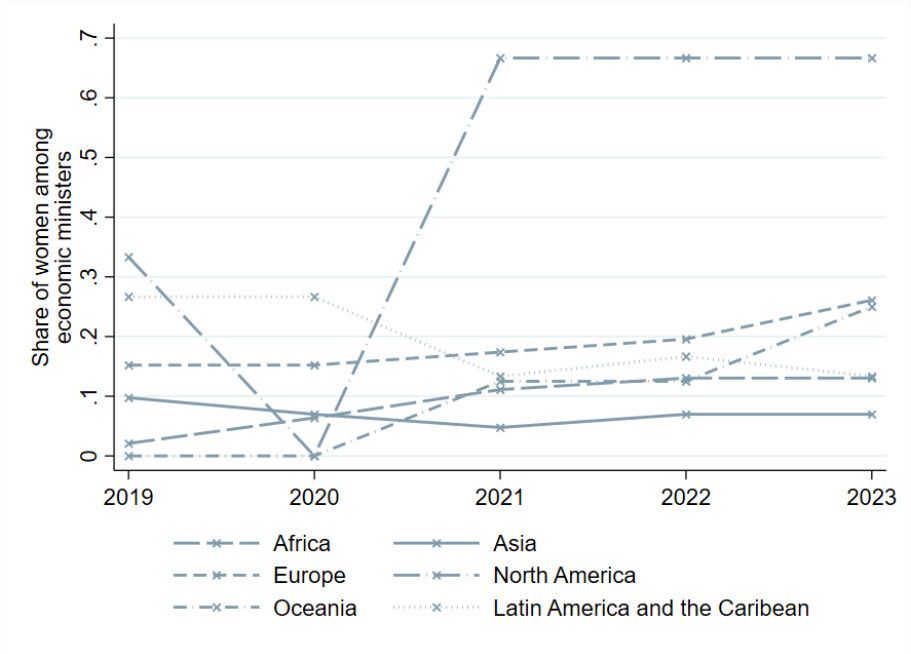


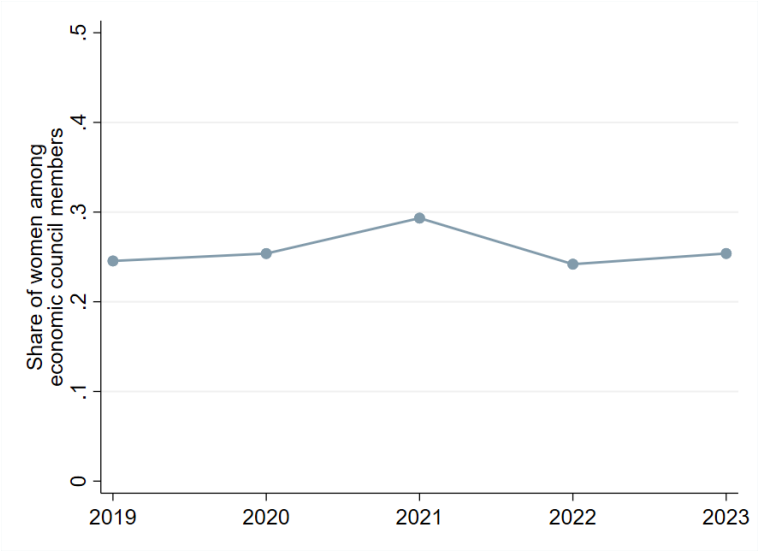
Figure 11: Share of women among finance ministers by region



4.3 Women as members of economic advisory councils

The third indicator we use for the public sector is the share of women as members of economic advisory councils. For these we search for economic advisory councils in all countries. These are typically expert councils staffed by economists or people with relevant practical experience. They give advice to the executive and/or legislative branch and thus inform policy making. The share is displayed in Figure 12. While the share increased from 25 % to 29 % from 2019 to 2021, it subsequently declined slightly to 24 % in 2022 and 25 % in 2023.

Figure 12: Share of women among economic advisory council members



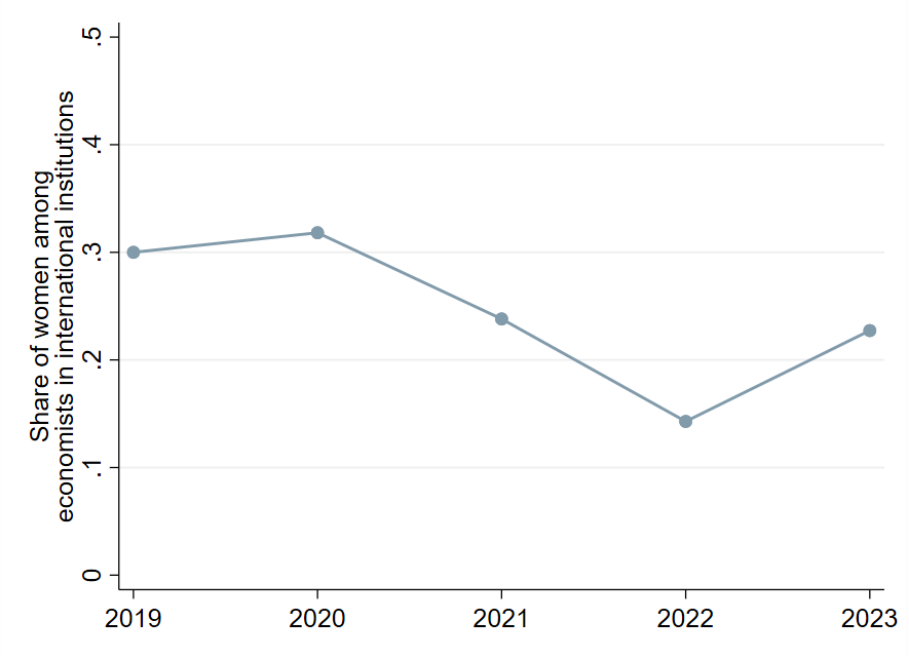
Due to the extension of the sample size of economic advisory councils in 2022, we do not perform a regional analysis for this indicator.

4.4 Women as chief economists of international institutions

The last component of the public sector is women as chief economists of international institutions. With this indicator we capture the representation of women economists in leadership positions at the international level. These organisations have a key role in coordinating international economic cooperation of nation states and have global influence. The selection of relevant international institutions is necessarily a judgement call. We include international public investment banks and organisations that feature prominently in the media. We focus on those institutions that are not specific to certain industries and are not purely focused on regulation. Where such a role exists, we look at the chief economist. If no chief economist position can be identified, we

use comparable, typically research oriented positions, whenever possible. For example, for the United Nations Conference on Trade and Development (UNCTAD), we select two positions that are equal in importance and concerned with relevant economics topics: the Directors of the Division on Investment and Enterprise and the Division on Globalization and Development Strategies. The share for women as chief economists in international institutions is shown in Figure 13. We observe a decline from 2020 to 2021 and 2022, but a subsequent increase in 2023. Because the number of observations for this indicator is relatively low (21 or 22 from 2020 onwards), a small change has a large impact on the share of women as chief economists.

Figure 13: Share of women as chief economist of international institutions



As most international institutions' work is done at a global level, we refrain from a regional analysis for this measure.

5 Conclusion

In this study, we document the share of women economists in a variety of leadership positions in the academic, private, and public sectors globally and by region using data from the annual WiE Index. Overall, we find low shares of women across sectors and most indicators. For the time period observed, we find no clear-cut trends. Complementing studies that have found women economists to be underrepresented in

leadership in academia, we conclude that this finding holds as well for other sectors in which economists are employed or economic research is conducted. In the academic sector, we find women's representation to be particularly high in Africa and Oceania, an observation that previous studies could not show as they analysed global top departments and thus mechanically focussed on Northern America and Europe. In the private sector, poor (public) data availability prevents us from identifying the presence or absence of trends, highlighting the need for more systematic data collection efforts.

Appendix

Table A-1: Numbers of observations - top authors of economic literature

	2019	2020	2021	2022	2023
World	100	100	100	100	100
of which men (%)	94 (94 %)	95 (95 %)	94 (94 %)	93 (93 %)	92 (92 %)
of which women (%)	6 (6 %)	5 (5 %)	6 (6 %)	7 (7 %)	8 (8 %)
Europe	100	100	100	100	100
of which men (%)	95 (95 %)	94 (94 %)	93 (93 %)	93 (3 %)	89 (89 %)
of which women (%)	5 (5 %)	6 (6 %)	7 (7 %)	7 (7 %)	11 (11 %)
Africa	100	100	100	100	100
of which men (%)	85 (85 %)	84 (84 %)	88 (88 %)	87 (87 %)	87 (87 %)
of which women (%)	15 (15 %)	16 (16 %)	12 (12 %)	13 (13 %)	13 (13 %)
Asia	100	100	100	100	100
of which men (%)	91 (91 %)	92 (92 %)	89 (89 %)	92 (92 %)	94 (94 %)
of which women (%)	9 (9 %)	8 (8 %)	11 (11 %)	8 (8 %)	6 (6 %)
Oceania	100	100	100	100	100
of which men (%)	86 (86 %)	85 (85 %)	87 (87 %)	85 (85 %)	85 (85 %)
of which women (%)	14 (14 %)	15 (15 %)	13 (13 %)	15 (15 %)	15 (15 %)
Latin America and Caribean	100	100	100	100	100
of which men (%)	94 (94 %)	92 (92 %)	90 (90 %)	92 (92 %)	92 (92 %)
of which women (%)	6 (6 %)	8 (8 %)	10 (10 %)	8 (8 %)	8 (8 %)
North America	200	200	200	200	200
of which men (%)	188 (94 %)	182 (91 %)	189 (94.5 %)	186 (93 %)	185 (92.5 %)
of which women (%)	12 (6 %)	18 (9 %)	11 (5.5 %)	14 (7 %)	15 (7.5 %)

Notes: The table shows the observation numbers for the global and the regional top 100 authors of the IDEAS/RePEc ranking considering the last 10 years of publications

Table A-2: Numbers of observations - faculty in top economics departments

	2020	2021	2022	2023
World	1695	1614	1608	1601
of which men (%)	1337 (78.9 %)	1249 (77.4 %)	1252 (77.9 %)	1243 (77.6 %)
of which women (%)	358 (21.1 %)	365 (22.6 %)	356 (22.1 %)	358 (22.4 %)
Europe	297	311	316	337
of which men (%)	226 (76.1 %)	233 (74.9 %)	235 (74.4 %)	247 (73.3 %))
of which women (%)	71 (23.9 %)	78 (25.1 %)	81 (25.6 %)	90 (26.7 %))
Africa	127	182	173	161
of which men (%)	85 (66.9 %)	96 (52.7 %)	91 (52.6 %)	81 (50.3 %))
of which women (%)	42 (33.1 %)	86 (47.3 %)	82 (47.4 %)	80 (49.7 %))
Asia	229	255	268	242
of which men (%)	176 (76.9 %)	196 (76.9 %)	206 (76.9 %)	183 (75.6 %))
of which women (%)	53 (23.1 %)	59 (23.1 %)	62 (23.1 %)	59 (24.4 %))
Oceania	282	279	284	281
of which men (%)	198 (70.2 %)	198 (71.0 %)	197 (69.4 %)	189 (67.3 %))
of which women (%)	84 (29.8 %)	81 (29 %)	87 (30.6 %)	92 (32.7 %))
Latin America	331	211	331	206
of which men (%)	243 (73.4 %)	173 (82.0 %)	241 (72.8 %)	164 (79.6 %))
of which women (%)	88 (26.6 %)	38 (18.0 %)	90 (27.2 %)	42 (20.4 %))
North America	279	277	275	279
of which men (%)	227 (81.4 %)	221 (79.8 %)	223 (81.1 %)	225 (80.6 %))
of which women (%)	52 (18.6 %)	56 (20.2 %)	52 (18.9 %)	54 (19.4 %))

Notes: The table shows the observation numbers for faculty members of the world top 25 and the regional top 5 economics departments

Table A-3: Numbers of observations - leaders of economics think tanks

	2019	2020	2021	2022	2023
Think Tanks	49	56	56	57	58
Leaders (total)	49	70	64	62	72
of which men (%)	40 (82.6 %)	53 (75.7 %)	48 (75 %)	48 (77.4 %)	56 (77.7 %)
of which women (%)	9 (18.4 %)	17 (24.3 %)	16 (25 %)	14 (22.6 %)	16 (22.2 %)
Leaders (weighted)	49	52	55	57	58
of which men (%)	40 (82.6 %)	41.33 (79.5 %)	44.25 (79.5 %)	45.9 (80.5 %)	45.8 (79 %)
of which women (%)	9 (18.4 %)	10.67 (20.5 %)	10.75 (19.5 %)	11.1 (19.5 %)	12.2 (21 %)

Notes: The table shows the observation numbers the leaders of top economics think tanks in absolute numbers and inversely weighted by the number of leaders per think tank.

Table A-4: Numbers of observations - chief economists of private sector companies

	2019	2020	2021	2022	2023
Global top 100	12	38	22	29	43
of which men (%)	9 (75 %)	30 (29 %)	18 (82 %)	22 (76 %)	34 (79.1 %)
of which women (%)	3 (25 %)	8 (21 %)	4 (18 %)	7 (24 %)	9 (20.9 %)
Banks	73	44	36	38	39
of which men (%)	61 (84 %)	35 (79.5 %)	31 (86 %)	32 (84 %)	29 (74.4 %)
of which women (%)	12 (16 %)	9 (20.5 %)	5 (14 %)	6 (16 %)	10 (25.6 %)
Insurance companies	34	13	11	21	14
of which men (%)	30 (88 %)	11 (85 %)	10 (91 %)	19 (90.5 %)	12 (92.9%)
of which women (%)	4 (12 %)	2 (15 %)	1 (9 %)	2 (9.5 %)	1 (7.1 %)
Private sector total	109	82	62	81	87
of which men (%)	93 (85.3 %)	69 (84.1 %)	54 (87.1 %)	69 (85.2 %)	70 (80.5 %)
of which women (%)	16 (14.7 %)	13 (15.9 %)	8 (12.9 %)	12 (14.8 %)	17 (19.5 %)

Notes: The table shows the observation numbers for each component of the private sector WiE Index. The number of "Private sector total" is lower than the sum of the indices because persons that are chief economists in a company that is, e.g., both a bank and a top 100 company are only counted once here.

Table A-5: Numbers of observations - chief economists of private sector companies by region

	2019	2020	2021	2022	2023
Africa	1	0	0	0	0
of which identified (%)	1 (100%)	n.a. (n.a.)	n.a. (n.a.)	n.a. (n.a.)	n.a. (n.a.)
of which men (%)	1 (100 %)	0 (n.a.)	0 (n.a.)	0 (n.a.)	n.a. (n.a.)
of which women (%)	0 (0 %)	0 (n.a.)	0 (n.a.)	0 (n.a.)	n.a. (n.a.)
Asia	71	59	66	75	68
of which identified (%)	24 (33.8 %)	18 (30.5 %)	16 (24.2 %)	23 (30.7 %)	27 (39.7 %)
of which men (%)	21 (87.5 %)	17 (94.4 %)	14 (87.5 %)	21 (91.3 %)	23 (85.2 %)
of which women (%)	3 (12.5 %)	1 (5.6 %)	2 (12.5 %)	2 (8.7 %)	4 (14.8 %)
Europe	117	50	46	44	39
of which identified (%)	58 (49.6 %)	33 (66.0 %)	25 (54.4 %)	30 (68.2 %)	29 (74.4 %)
of which men (%)	51 (87.9%)	27 (81.8 %)	22 (88.0 %)	26 (86.7 %)	23 (79.3 %)
of which women (%)	7 (12.1 %)	6 (18.2 %)	3 (12.0 %)	4 (13.3 %)	6 (20.7 %)
North America	60	53	56	59	59
of which identified (%)	25 (40.3 %)	24 (45.3 %)	17 (30.4 %)	25 (42.4 %)	27 (45.8 %)
of which men (%)	18 (72.0 %)	18 (75.0 %)	14 (82.4 %)	19 (76.0 %)	20 (%)
of which women (%)	7 (18.0 %)	6 (25.0 %)	3 (17.6 %)	6 (%)	7 (24.0 %)
Oceania	7	4	1	0	0
of which identified (%)	6 (85.7 %)	4 (100 %)	1 (100 %)	(n.a.)	(n.a.)
of which men (%)	6 (100 %)	4 (100 %)	1 (100 %)	(n.a.)	(n.a.)
of which women (%)	0 (0 %)	0 (0 %)	0 (0 %)	(n.a.)	(n.a.)
South and Central America	5	6	3	3	6
of which identified (%)	3 (60 %)	3 (50 %)	3 (100 %)	3 (100 %)	4 (66.7 %)
of which men (%)	3 (100 %)	3 (100 %)	3 (100 %)	3 (100 %)	4 (100 %)
of which women (%)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)

Notes: The table shows the observation numbers by world region for the private sector WiE Index. The observation numbers are lower than those used for the index calculation because persons that are chief economists in a company that is, e.g., both a bank and a top 100 company are only counted once here.

Table A-6: Numbers of observations - finance ministers

	2019	2020	2021	2022	2023
World	176	177	174	176	176
of which men (%)	155 (88 %)	156 (88 %)	152 (87 %)	150 (85 %)	147 (84 %)
of which women (%)	21 (12 %)	21 (12 %)	22 (13 %)	26 (15 %)	29 (16 %)
Europe	46	46	46	46	46
of which men (%)	39 (85 %)	39 (85 %)	38 (83 %)	37 (80 %)	35 (76 %)
of which women (%)	7 (15 %)	7 (15 %)	8 (17 %)	9 (20 %)	12 (24 %)
Africa	48	47	45	46	46
of which men (%)	47 (98 %)	44 (94 %)	40 (89 %)	40 (87 %)	40 (87 %)
of which women (%)	1 (2 %)	3 (6 %)	5 (11 %)	6 (13 %)	6 (13 %)
Asia	41	43	42	43	43
of which men (%)	37 (90 %)	40 (93 %)	40 (95 %)	40 (94 %)	40 (94 %)
of which women (%)	4 (10 %)	3 (7 %)	2 (5 %)	3 (7 %)	3 (7 %)
Oceania	8	8	8	8	8
of which men (%)	8 (100 %)	8 (100 %)	7 (87 %)	7 (87 %)	6 (75 %)
of which women (%)	0 (0 %)	0 (0 %)	1 (13 %)	1 (13 %)	2 (25 %)
Latin America and Caribbean	30	30	30	30	30
of which men (%)	22 (73 %)	22 (73 %)	26 (87 %)	25 (83 %)	26 (87 %)
of which women (%)	8 (27 %)	8 (27 %)	4 (13 %)	5 (17 %)	4 (13 %)
North America	3	3	3	3	3
of which men (%)	2 (67 %)	3 (100 %)	1 (33 %)	1 (33 %)	1 (33 %)
of which women (%)	1 (33 %)	0 (0 %)	2 (67 %)	2 (67 %)	2 (67 %)

Notes: The table shows the observation numbers for the finance ministers.

Table A-7: Numbers of observations - governors of central banks

	2019	2020	2021	2022	2023
World	179	179	179	179	179
of which men (%)	165 (92 %)	165 (92 %)	164 (92 %)	160 (89 %)	158 (88%)
of which women (%)	14 (8 %)	14 (8 %)	15 (8 %)	19 (11 %)	21 (12%)
Europe	47	47	47	47	47
of which men (%)	44 (94 %)	42 (89 %)	42 (89 %)	41 (87 %)	39 (83 %)
of which women (%)	3 (6 %)	5 (11 %)	5 (11 %)	6 (13 %)	8 (17 %)
Africa	47	47	47	47	47
of which men (%)	46 (98 %)	45 (96 %)	44 (94 %)	45 (96 %)	45 (96 %)
of which women (%)	1 (2 %)	2 (4 %)	3 (6 %)	2 (4 %)	2 (4 %)
Asia	43	43	43	43	43
of which men (%)	40 (93 %)	42 (98 %)	41 (95 %)	41 (95 %)	40 (93 %)
of which women (%)	3 (7 %)	1 (2 %)	2 (5 %)	2 (5 %)	3 (7 %)
Oceania	8	8	8	8	
of which men (%)	7 (88 %)	7 (88 %)	7 (88 %)	7 (88 %)	7 (88 %)
of which women (%)	1 (12 %)	1 (12 %)	1 (12 %)	1 (12 %)	1 (12 %)
Latin America and the Caribbean	30	30	30	30	30
of which men (%)	25 (83 %)	25 (83 %)	26 (87 %)	22 (73 %)	23 (77 %)
of which women (%)	5 (17 %)	5 (17 %)	4 (13 %)	8 (27 %)	7 (23 %)
North America	3	3	3	3	3
of which men (%)	3 (100 %)	3 (100 %)	3 (100 %)	3 (100 %)	3 (100 %)
of which women (%)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)	0 (0 %)

Notes: The table shows the observation numbers for the regional central bank governors.

Table A-8: Numbers of observations - members of economic advisory councils

	2019	2020	2021	2022	2023
Councils	4	17	14	46	60
Council Members	247	446	395	935	1497
of which men (%)	140 (57 %)	310 (70 %)	272 (69 %)	679 (73 %)	1042 (70 %)
of which women (%)	107 (43 %)	136 (30 %)	123 (31 %)	256 (27 %)	455 (30 %)

Notes: The table shows the observation numbers of the members of economic advisory councils. Note that due to the expansion in the data collection, the numbers of observations increase over time.

Table A-9: Numbers of observations - chief economists of international institutions

	2019	2020	2021	2022	2023
International Institutions	40	22	21	21	22
of which men (%)	28 (70 %)	15 (68 %)	16 (76 %)	18 (86 %)	17 (77 %)
of which women (%)	12 (30 %)	7 (32 %)	5 (24 %)	3 (14 %)	5 (23 %)

Notes: The table shows the observation numbers of the chief economists of international institutions.

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