

# The Women in Economics Index 2023

# **Foreword**

Dear reader,

I am happy to present you with the fifth edition of the Women in Economics Index, an annual statistical report by The Women in Economics Initiative, studying gender parity in the economics profession.

Similar to previous editions, we once again find that women are dramatically underrepresented in all leadership positions for economists, with a slight upward trend compared to last year. The distribution of power within the profession still has a large gender bias, which has far-reaching implications on decision-making processes and should be taken into account by organisations across the academic, public and private sectors.

We are looking forward to receiving your thoughts and comments.

Sandra Kretschmer (Head of Research)



# **C**ontents

I	cutive summary	2	
2	Abo	out the Women in Economics Index	4
3	The	e Women in Economics Index 2023	6
4	Aca	demic Sector	7
	<b>4</b> . I	Methodology	7
	4.2	Women as top authors of economic literature	7
	4.3	Women as leaders of top economics think tanks	8
	4.4	Women as faculty members of top economics departments	8
	4.5	The WiE Index 2023 – Academic Sector	9
	4.6	Supplementary Statistics	10
5	Priv	vate Sector	16
	<b>5</b> . I	Methodology	16
	5.2	Women as chief economists of general top 100 firms	17
	5.3	Women as chief economists of banks	18
	5.4	Women as chief economists of insurance companies	18
	5.5	The WiE Index 2023 - Private Sector	18
	5.6	Supplementary statistics	20
6	Pub	olic Sector	21
	6. l	Methodology	21
	6.2	Women as governors of central banks	21
	6.3	Women as finance ministers	22
	6.4	Women on economic advisory councils	22
	6.5	Women as chief economists of international institutions	23
	6.6	The WiE Index 2023 – Public Sector	24
	6.7	Supplementary statistics	24
7	Cor	nclusion and outlook	29
Re	efere	nces	30



# **List of Tables**

ı	Summary statistics academic sector	13
2	Spotlight: Leaky pipeline in the academic sector	15
3	Summary statistics Private Sector	19
4	Summary statistics of central bank governors by region	25
5	Summary statistics Public Sector	27
6	Overview of sampled economic institutions	28
ist(	of Figures	
I	WiE Index 2023	6
2	WiE Index 2022	6
3	Components of the Academic Sector	9
4	WiE Index - Academic Sector	10
5	Women as top authors by region	П
6	Women as faculty members of top economics departments by region	12
7	Women as faculty members of top economics departments by position	14
8	Components of the Private Sector	19
9	WiE Index - Private Sector	19
10	Women as chief economists of global companies by region	20
П	Components of the Public Sector	24
12	WiE Index - Public Sector	25
13	Women as governors of central banks by region	26
14	Women as finance ministers by region	26
15	WiE Index 2023	29



# I Executive summary

The Women in Economics Index (WiE Index) monitors and tracks the share of women economists in leadership positions in the academic, private, and public sectors globally. Each year we collect data on different indicators capturing women economists' representation in leadership positions in each sector and aggregate them into an index that ranges from 0 to 100, where 0 represents no gender diversity and 100 represents parity.

The WiE Index is published by The Women in Economics Initiative (WiE), an organization that was established to advance gender equality in the field of economics. The WiE Index 2023 is the fifth edition of the WiE Index and continues the series of annual reports since 2019.

The key result of the WiE Index 2022 was an overall low share of women across sectors, with index values of 33 in the academic and the private sector and 32 in the public sector. In 2023, these values increase slightly to 34 in the academic and 36 in both the private and public sector. These numbers result from women's shares in the different indicators between 7 % and 28 %. While these values are still low, for the first time since our first WiE Index report, a slight general improvement of women's representation in leadership roles in economics can be observed.

In the academic sector, we find that women make up only 8 % of top authors of economics literature, 21 % of leaders of economics think tanks and 22.3 % of faculty members in top economics departments. In the private sector, we find 20.9 % among chief economists of the biggest global companies, 7.1 % for insurance companies and 26.3 % for banks. In the public sector, we find a women's share of 11.7 % for central bank governors, 16.5 % for finance ministers, 21.4 % for national economic advisory councils and a share of 22.7 % among chief economists of international economic institutions.

Supplementary statistics provide a more nuanced view of gender equality in economics, especially along the geographic dimension. In general, Africa and Oceania, again as in 2022, exhibit the highest shares of women in the academic sector e.g. as authors of economics literature (13 % and 15 % as compared to 8 % in the world ranking) and women faculty (49.7 % and 32.7 % compared to 22.3 % in global top economics departments). As for chief economists in the private sector, roughly a fifth



of them are women in North America (23.3 %), Asia (22.6 %) and Europe (20 %), while no women are employed as chief economists in South America. Regarding central bank governors and finance ministers, North America has the highest share of women with 33.3 % and 66.6 %, respectively.

Finally, this year's spotlight covers the leaky pipeline, i.e. women's attrition across career stages in academia. In line with results from previous research, we find clear indications for a leaky pipeline in the top economics departments, both globally and in each world region.



#### 2 About the Women in Economics Index

What is our goal? The Women in Economics Initiative (WiE) was established to advance gender equality in the field of economics. Our goal is to encourage equal opportunity and a balanced representation of genders in the economics profession across the academic, private, and public sectors. This includes highlighting the contributions that women make to economic research, its application through policy and in business decisions, and the representation of women economists in leadership positions.

How do we pursue it? The annual WiE Index monitors and tracks the share of women economists in senior leadership positions across the academic, the private, and public sectors globally. With the first report released in 2019, each year we collect data on different indicators capturing women economists' representation in leadership positions in each of these sectors, aggregate them into an index and publish a summary of our findings. This way, we aim to assess the development of women's representation in leadership roles in the economics profession over time and increase transparency on the state of gender diversity to facilitate constructive dialogue.

Although we have used binary gender classification of women and men in this year's WiE Index, we are aware that there can be non-binary economists in our sample who do not fall into this binary classification. It was difficult to identify non-binary economists as they were not necessarily visible, but we are considering ways to improve our methodology in this respect to ensure that the WiE Index reflects an understanding of diversity in economics that goes beyond a binary concept of gender. We welcome any feedback and suggestions in this regard.

What does the WiE Index consist of? The WiE Index consists of three sections, representing the most important sectors where many economists are employed as well as where economic research is conducted or affects decision-making. These are, in alphabetical order:

- I. the Academic Sector;
- 2. the Private Sector;
- 3. the Public Sector.

For each of these sectors, the WiE Index provides an annual snapshot of the repre-



sentation of women in senior positions.

For the Academic Sector, we analyse the top authors of economic literature (in peer-reviewed, scholarly journals), the leaders of top economics think tanks, and the faculty members of top economics departments. The Private Sector investigates the chief economists of the largest companies, banks and insurances worldwide, respectively. The Public Sector takes into account governors of central banks, finance ministers, economic advisory councils, and chief economists of international economic institutions.

We also provide supplementary statistics on regional variation in the indicator values that, however, do not enter the calculation of the WiE Index. The data has been collected between May and September 2023. Changes in reported values for the previous year relative to the 2022 publication are due to additional data points that have been uncovered since last year's report and a few corrections.

What is our methodology? For each sector, we calculate an aggregate statistic - the "WiE Index". We take the unweighted arithmetic mean of the percentage shares of women for the relevant indicators of the respective sector. Then we compute the difference to parity (50 % women and 50 % men). While this is not supposed to prescribe parity as the normative goal or ideal, it helps to illustrate the existing gender imbalances, in particular the low representation of women economists in many fields. The WiE Index is scaled such that a value of 100 represents parity, while a value of 0 represents a share of 100 % men or women across the relevant indicators.

If, for example, the average share of women in a category is found to be 10 %, the WiE Index would be computed by calculating the difference from parity (50 % minus 10 %, i.e. 40 %), scaling this by multiplying 40 % by two, and subtracting the result from 100 %. The resulting percentage value is multiplied by 100 to obtain an index value. In this hypothetical example, the index value would be 20. In this way, the WiE Index works symmetrically. A share of 49 % women in a category would result in an index value of 98. Equally, a share of 51 % women in a category would result in an index value of 98.



# 3 The Women in Economics Index 2023

The WiE Index 2023 finds that women economists' representation in leadership positions continues to be low in all three sectors, i.e. the academic, the private and the public sector. The WiE Index 2023 for the academic, private, and public sectors evaluates to 34, 36, and 36 points, respectively. These values result from women's shares in the different indicators between 7 % and 28 %.

While these values are still low, for the first time since our first WiE Index report in 2019, a slight general improvement of women's representation in leadership roles in economics can be observed. Compared to 2022, the index values increased by 1, 3 and 4 points in the academic, private, and public sector, respectively.



Figure 1: WiE Index 2023



Figure 2: WiE Index 2022



# 4 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. Furthermore, the presence of women economists in academic leadership positions exposes younger generations to a more diverse academic body and teachings as well as women economists in senior positions already during their studies. This normalises female leadership in economics early on and ensures that there are role models to look up to.

# 4.1 Methodology

As in previous years, the WiE index for the academic sector is composed of three indicators - the share of women among the top 100 authors of economics 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. In addition to the WiE index for the academic sector based on these indicators, we conduct analyses for the top 100 authors and top 5 departments by world regions - Africa, Asia, Europe, Latin America, North America and Oceania. In this year's WiE index, we further provide a spotlight on the "leaky pipeline" in economics departments.

# 4.2 Women as top authors of economic literature

The first indicator considers the share of women authors among the top 100 of the latest<sup>1</sup> IDEAS/RePEc ranking, which considers the last ten publication years.<sup>2</sup> This list ranks registered economists according to the harmonic mean of their respective ranking in over 30 citation measures, powered by the CitEc project.<sup>3</sup> While the RePEc database of authors is not a complete sample of all academic economists in the world, it is the most complete effort of such an overview to our knowledge. Additionally, the data is free and openly available. In line with our focus on the leading figures of the profession, we restrict our analysis to the top 100 authors and calculate the share

At the time of data collection in July 2023, the rankings were as of May 2023.

<sup>&</sup>lt;sup>2</sup>See IDEAS (2023a).

<sup>&</sup>lt;sup>3</sup>See CitEc (2023).



of women among them.

Among the first 100 authors, eight are women, resulting in a share of 8 % for this indicator. This share increased by one percentage point compared to the previous year, when it stood at 7 %.

# 4.3 Women as leaders of top economics think tanks

The second indicator considers the share of women as leaders of economics think tanks. We look at all 58 think tanks listed in the ranking "Top 25 % Think Tanks, all authors, all publication years" by IDEAS/RePEc (as of June 2023). Economics think tanks are important institutions for research in economics 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 positions, 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).

Out of the 58 think tanks, one think tank had three women among five leaders, one had one woman among two leaders, one had one woman among ten leaders, and eleven had a woman in a unique leading position. Overall, the weighted share of women leaders among the top 25 % think tanks amounts to 21.0 %. This share increased slightly by 1.5 percentage points compared to the previous year, when it stood at 19.5 %.

# 4.4 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 are conducting, their curriculum and the presence of a diverse faculty who can be role models for the next generation. Therefore, we investigate women's presence among the faculties of the top 25 economics departments

<sup>&</sup>lt;sup>4</sup>See IDEAS (2023b). We use data for all publication years because, for think tanks, IDEAS/RePEc does not provide the data for the last 10 publication years, which we use for the top authors of economics literature indicator.



in the world. To calculate this share, we collect university rankings data from the QS World University Ranking 2023.<sup>5</sup> 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. Our analysis finds the women's share in the top 25 economics departments to stay roughly constant at 22.3 % compared to 22.0 % in 2022.

#### 4.5 The WiE Index 2023 – Academic Sector

Figure 3 summarises the shares of women and men as top authors in economics, faculty members of top economics department and leaders of top economics think tanks. These shares form the base components for the academic sector of the WiE Index 2023.

We construct the WiE Index 2023 for the academic sector as described in section 2. The average share of women across the three sub-components of the academic sector is 17.1 % in 2023. This translates into a value of 34 for the WiE Index 2023, as compared to 32 in 2022 (Figure 4). The increase in the index value is a result of an increase in the share of women as top authors by one percentage point, among think tank leaders by 1,5 percentage points and among faculty members by 0.3 percentage points.

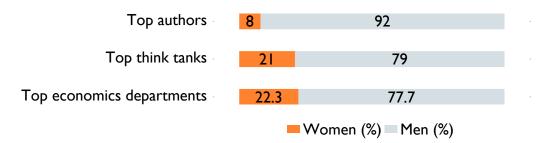


Figure 3: Components of the Academic Sector

<sup>&</sup>lt;sup>5</sup>See QS Quacquarelli Symonds Limited (2023)



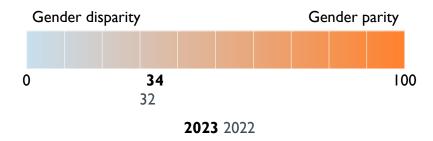


Figure 4: WiE Index - Academic Sector

# 4.6 Supplementary Statistics

In addition to the indicators given above, we provide additional insights on the representation of women economists in the academic sector by region as well as among top young authors. These statistics do not enter the calculation of the WiE Index, but are presented to shed light on heterogeneity between geographical regions and cohorts of researchers, and thus paint a more comprehensive picture of gender equality in the academic field of economics.

#### Women as top authors of economic literature by region

We consider the RePEc rankings of top authors by region as of May 2023 in our analysis. We again use the measures that are based on the last ten publication years. We consider the following regions: Africa, Asia, Europe, Latin America and the Caribbean, North America, and Oceania. As no ranking for North America exists, we combine the top one hundred authors for the USA and Canada to calculate a share for North America. The results are presented in Figure 5.

Our analysis shows that Oceania, as in 2022, has the highest share of women among top authors with 15% (2022: 15%). Africa has the second highest share of women with 13% (2022: 13%), followed by Europe with 11% (2022: 7%), Latin America with 8% (2022: 8%), North America with 8% (2022: 7%), and Asia with 6% (2022: 8%). Europe experienced the largest increase in the share of women among top authors compared to the previous year. North America experienced a slight increase, while Asia experienced a fall in the share of women among top authors from the previous year and has the lowest regional share of women in 2023.

<sup>&</sup>lt;sup>6</sup>See IDEAS (2023c).



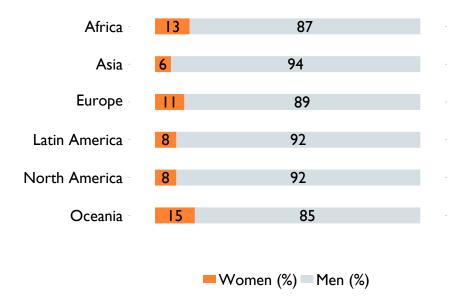


Figure 5: Women as top authors by region

#### Women as faculty members of top economics departments by region

We collected faculty data on the top 5 departments in every region, which we identified using the QS World University Ranking 2023 for "Economics & Econometrics". The results from our analysis are presented in Figure 6. It shows that Africa has the highest regional share of women in top economics departments with 49.7 % (2022: 47.4 %), followed by Oceania with 32.7 % (2022: 30.6 %). The regional analysis further demonstrates the large regional variations in the share of women: While North American universities dominate world rankings for economics, the region has the lowest share of women among economics faculty members with 19.1 % (2022: 18.9 %).

#### Women as top young authors

In addition to the regional analysis, we consider the share of women among top young authors of economics literature. We include this statistic to capture potential cohort effects resulting in differences between the overall representation of women among top authors and younger cohorts of researchers.

We use the RePEc ranking of the top young economists as of May 2023.<sup>8</sup> This ranking considers economists whose first publication of any kind dates from 10 years or less. Only the first 100 authors of this ranking were included in our analysis. The share of

<sup>&</sup>lt;sup>7</sup>See QS Quacquarelli Symonds Limited (2023)

<sup>&</sup>lt;sup>8</sup>See IDEAS (2023d).



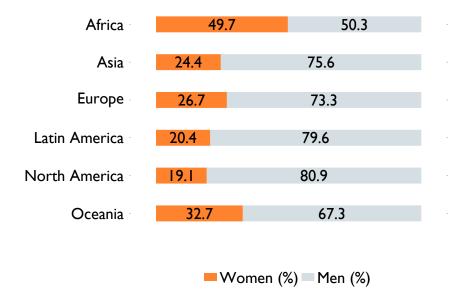


Figure 6: Women as faculty members of top economics departments by region

women among the top young authors amounts to 15 %. This is higher than the overall world and regional shares for authors.

#### **Spotlight**

Our spotlight is on the "leaky pipeline" in academia. Leaky pipeline is a phenomenon describing the fact that across career stages, women's attrition is higher than men's. To analyse the leaky pipeline in the academic sector, we use our data from the section "Women as faculty members of top economics departments". Besides name and gender, we also collect the official job title according to the homepage.

Following Auriol et al. (2022), we classify our entries into three categories: Senior-level positions (full professors and associate professors), entry-level positions (assistant professors and lecturers) and research fellows (including postdoctoral researchers). Table 2 shows our results for the top 25 departments globally as well as for the regional analysis, which only considers the top 5 economic department per region. Because of a very low number of observations, the shares for research fellows should be interpreted with caution.

<sup>&</sup>lt;sup>9</sup>We do not include the most junior category from Auriol et al. (2022), "research associate", since many universities in our sample do not list them and the WiE Index focuses on leadership and thus more senior positions.



Table 1: Summary statistics academic sector

			Ger	nder		
	Women		Men		Tot	:al
	No.	%	No.	%	No.	%
Academic sector						
World top 100 authors	8	8.0	92	92.0	100	100
World top 25 departments	357	22.3	1,241	77.7	1,598	100
Top think tanks*	16	22.2	56	77.8	72	100
Regional top authors						
Africa	13	13.0	87	87.0	100	100
Asia	6	6.0	94	94.0	100	100
Europe	П	11.0	89	89.0	100	100
Latin America	8	8.0	92	92.0	100	100
North America	15	7.5	185	92.5	200	100
Oceania	15	15.0	85	85.0	100	100
Regional top departments						
Africa	80	49.7	81	50.3	161	100
Asia	59	24.4	183	75.6	242	100
Europe	90	26.7	247	73.3	337	100
Latin America	43	20.4	164	79.6	206	100
North America	53	19.1	225	80.9	278	100
Oceania	92	30.7	189	67.3	281	100
World young authors						
Top 100 young authors	15	15.0	85	85.0	100	100

<sup>\*</sup>Summary statistics for leaders of think tanks are reported unweighted here.



In line with results from previous research, we see clear indications for a leaky pipeline in the top economics departments, both globally (see Figure 7) and in each region. As in the general regional analysis of departments, Africa has the highest shares across all levels. However, a twenty percentage points drop between entry and senior level positions is worth noting. In contrast, the gap between entry and senior level positions in Asia and Europe appears rather small. The numbers for Latin America are difficult to interpret as most of the observations are on the senior level. In North America and Oceania, the numbers across entry and senior level positions indicate a sizeable leak.

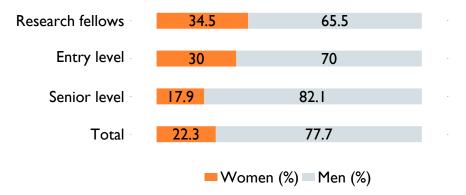


Figure 7: Women as faculty members of top economics departments by position



Table 2: Spotlight: Leaky pipeline in the academic sector

	Gender					
	Wo	men	Me	en	Tot	al
	No.	%	No.	%	No.	%
Academic Sector						
Research fellows	29	34.5	55	65.5	84	100
Entry level	142	30.0	33 I	70.0	473	100
Senior level	186	17.9	853	82. I	1,039	100
Total	357	22.3	1,241	77.7	1,598	100
Regional top departments						
Africa						
Research fellows	3	75.0	I	25.0	4	100
Entry level	39	60.9	25	39.6	64	100
Senior level	38	40.9	55	59. I	93	100
Total	80	49.7	81	50.3	161	100
Asia						
Research fellows	0	n.a.	0	n.a.	0	100
Entry level	21	27.3	56	72.7	77	100
Senior level	37	23.0	124	77.0	161	100
Total	59	24.4	183	75.6	242	100
Europe						
Research fellows	20	44.4	25	55.6	45	100
Entry level	19	29.2	46	70.8	65	100
Senior level	51	22.7	174	77.3	225	100
Total	90	26.7	247	73.3	337	100
Latin America						
Research fellows	I	12.5	7	87.5	8	100
Entry level	8	24.2	25	75.8	33	100
Senior level	32	19.8	130	80.3	162	100
Total	43	20.4	16 <del>4</del>	79.6	206	100
North America						
Research fellows	4	28.6	10	71. <del>4</del>	14	100
Entry level	20	26.3	56	73.7	76	100
Senior level	29	15.4	159	84.6	188	100
Total	53	19.1	225	80.9	278	100
Oceania  Personal follows	r	<b>42</b> E	2	27 F	0	100
Research fellows	5 49	62.5 40.0	3 72	37.5 40.0	8 120	100
Entry level	48 20	40.0	72	60.0	120	100
Senior level	38	25.0	114	75.0	152	100
Total	92	30.7	189	67.3	281	100

Higher numbers of cases in "Total" are due to persons whose position/title could not be clearly identified.



# 5 Private Sector

Activity in the private sector accounts for the largest 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. In this section, we will examine the representation of women in the role of chief economists within the world's largest companies, banks, and insurance companies. The choice of indicators remains consistent with previous years. This choice is motivated by the fact that, within the banking and insurance industries, large companies typically employ research economists. In contrast, in other sectors, dedicated research economists are usually found only in the largest companies. Chief economists typically oversee economic research teams and provide guidance to corporate leadership on economics-related matters. The WiE Index for this sector is calculated based on the mean representation of women in chief economist positions across these three categories. Furthermore, as in other sectors, we provide a geographical breakdown of the aggregated data.

# 5.1 Methodology

We identify the largest companies based on revenue using the Global 500 ranking provided by Fortune Media (2023). From this ranking, we take the 100 largest companies by revenue, as well as all insurances and banks that are listed in the top 500. It is important to note that individual companies may appear in two indicators if they are both a bank or insurance company and one of the top 100 largest companies.

Among the 95 chief economists identified, 38 are employed by banks (the same as in 2022), 14 are employed by insurance companies (compared to 21 in 2022), and 43 are employed by other companies within the top 100 of the Fortune 500 list (compared to 29 in 2022). 12 companies are counted twice, as they appear in both the top 100 and the banking or insurance sector. Therefore, we collect data on 83 distinct companies and their respective chief economists.

The identification process is based on a comprehensive review of websites, press releases and news articles to determine the gender of the chief economists. Yet, identifying chief economists across different companies has consistently proven to be challenging due to a lack of transparency. In total, compile a sample of 184 companies, which includes those companies that are part of both the general top 100 companies



and either banks or insurance companies. Within this sample, we can identify 95 chief economists, representing approximately 51.6 % of the sampled companies (compared to 45.1 % in 2022). The remaining companies either do not employ a chief economist or disclose no information about this position.

For the supplementary statistic on the regional distribution, we group the companies according to the location of their headquarters. This year we have companies from South and Central America, North America, Europe and Asia. The other world regions are not represented within the sampled companies.

We have noted significant year-on-year fluctuations when compared to other sectors of the WiE Index, both in the group of sampled companies and the employed individuals, which may indicate a higher turnover rate within the private sector as compared to the academic and public sector. Nevertheless, this year's data unequivocally underscore the low representation of women in the position of chief economists within major companies.

# 5.2 Women as chief economists of general top 100 firms

The representation of women in the role of chief economists within major corporations remains significantly lower than that of their male counterparts. As depicted in Figure 8, the proportion of women serving as chief economists in the top 100 largest companies is 20.9 %, down from 24.1 % in 2022 and 25 % in 2021. This data reveals a consistent downward trend over the past three years. However, it should be noted that in this year we were able to collect data on 14 additional companies.

This decline in the percentage of women as chief economists underscores the need for further examination and initiatives aimed at achieving greater gender diversity within top-tier corporate economics leadership positions. Further, while in some areas of the private sector, such as women's general workforce participation, there has been substantial progress towards gender equality in past decades, our findings are in line with persisting gender gaps in leadership positions such as on corporate boards and in higher-level management across industries and countries.



#### 5.3 Women as chief economists of banks

In this year's data, the representation of women as chief economists in the banking companies surpasses that of the insurance and global top 100 companies, demonstrating a noteworthy increase. In 2023, women hold 26.3 % of chief economist positions in banks, a substantial leap from the 15.8 % recorded in 2022, as illustrated in Figure 8. This indicates a remarkable growth of 10.5 percentage points over the course of just one year.

The banking sector's significant progress in bolstering the presence of female chief economists has played a pivotal role in elevating the private sector's WiE Index by 3 points in the current year. However, it is important to note that despite this improvement, women's representation remains disproportionately low also here. This shows the pressing need for continued efforts to enhance gender diversity within senior positions in the banking industry, as well as the broader private sector.

## 5.4 Women as chief economists of insurance companies

As in previous years, the insurance sector reports the lowest representation of women among its chief economists, with a meagre 7.1 %. This figure represents a notable decline, falling from the 9.5 % recorded in 2022 and 13 % in 2021.

In the current year, we once again observe a decrease in the number of companies reporting their chief economist on a public platform or perhaps the absence of such a position altogether. Consequently, we are faced with constraints in deriving deeper insights from these statistics. The ongoing challenges in tracking this data emphasise the need for greater transparency and gender diversity efforts within the insurance sector, where women remain underrepresented in leadership roles.

#### 5.5 The WiE Index 2023 - Private Sector

Building upon the indicator shares presented in Figure 8, we calculate the WiE Index for the private sector as described in section 2. These most recent findings lead to an index value of 36 out of 100 points, signifying a slight improvement compared to the 2022 index, which was 33 points. (see Figure 9). This 3-point increase can primarily be attributed to the remarkable surge of 10.5 percentage points in the women's share



Table 3:	Summary	statistics	<b>Private</b>	Sector
	<b></b>			

	Gender					
	Women		Men		To	tal
	No.	No. %		No. %		%
Private Sector						
Banks	10	26.3	28	73.7	38	100
Insurance companies	I	7. I	13	92.9	14	100
General companies top 100	9	20.9	34	79. I	43	100
South and Central America	0	0.0	4	100.0	4	100
North America	7	23.3	23	76.7	30	100
Europe	6	20.0	24	80.0	30	100
Asia	7	22.6	24	77.4	31	100

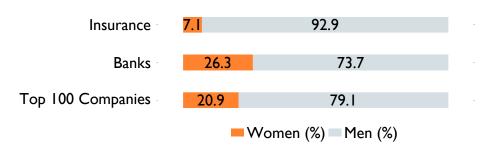


Figure 8: Components of the Private Sector

among chief economists in the banking sector from 15.8 % in 2022 to 26.3 % in 2023.

However, the landscape is not entirely uniform. Both the top 100 companies and Insurance Companies have experienced a decline in women's representation, with a decrease of 3.2 and 2.4 percentage points, respectively.

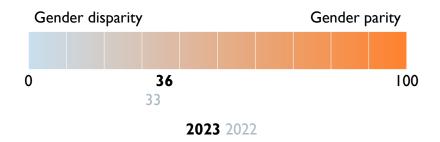


Figure 9: WiE Index - Private Sector



# 5.6 Supplementary statistics

In terms of regional distribution among the companies considered in our sample, 95.8 % have their headquarters based in North America (31.6 %), Europe (31.6 %), or Asia (32.6 %).

This year, the percentage of Asia-based companies increased by 7.63 percentage points. This could be attributed to two possible factors: an increased presence of Asian companies in the top rankings or a higher level of reporting from these companies.

This year, we have managed to collect data on four companies in the South and Central American region, which is one more than in the previous year. None of these companies employ a woman as chief economist. It is important to note, however, that our assessment of women economists' representation in the Central and South American private sector is based on just these four companies, which offers only a limited perspective on the state of women economists in the private sector in that region.

The other three regions each display relatively low shares of women holding the position of chief economist, as illustrated in Figure 10: North America with 23.3 %, Asia with 22.6 %, and Europe with 20 %. North America leads in terms of female representation among chief economists. When comparing these figures to the previous year, we find that North America's representation remains unchanged, while Asia shows an increase in the share of women economists by 7 precentage points, catching up with North America during the same time period. Also, we observe a 5 percentage points increase in Europe, from 15 % in 2022.

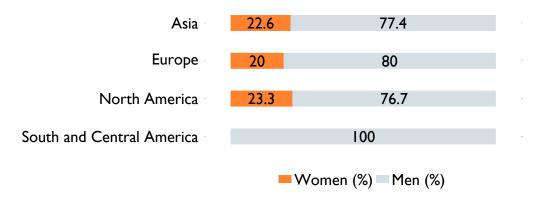


Figure 10: Women as chief economists of global companies by region



# 6 Public Sector

Economists in the public sector, such as in government cabinets, central banks and other public institutions, design and implement policies that matter for societal economic outcomes. Women economists in this sector can help increase diversity of perspectives and thus help design policies that address the needs and challenges faced by diverse social groups. We use four indicators to capture different dimensions that economic policy entails: the share of women among governors of central banks, the share of women among finance ministers, the share of women in economic advisory councils and the share of women as chief economists of international economics institutions.

# 6.1 Methodology

This year, we collect data on governors of central banks of 177 countries (that in part share a central bank), the European Central Bank (ECB), the central bank for the Organization of Eastern Caribbean States, 176 finance ministers, 46 economic advisory councils and 21 chief economists at international economics institutions. Our main sources are the official websites of these institutions. When we could not find the information on the official websites, we used secondary sources such as Bloomberg, Reuters or newspapers. Data collection took place from July to September 2023.

We then calculate the share of women within each category, weighting different countries and institutions equally. There is only one governor position for central banks or one finance minister per country. For economic advisory councils, the number of members across councils varies. For institutions, there is one case where we find two relevant positions. To give equal weight to each council or international institution, we use the simple mean share of women as members of a certain council or chief economists of an institution.

# 6.2 Women as governors of central banks

The first indicator is the share of women who are governors of central banks. The list of countries with associated central banks provided by the Bank for International Settlements (BIS) serves as a starting point for an overview of the existing central banks in the world.<sup>10</sup> The BIS describes itself as a bank and service provider for central banks,

<sup>&</sup>lt;sup>10</sup>See Bank for International Settlements (2022).



fostering international cooperation. Their list currently includes 179 central banks, including the ECB and the central bank for the Organization of Eastern Caribbean States. Some central banks, such as the Bank of Central African States, are responsible for several countries. We also consider the European System of Central Banks (ESCB) which consists of the ECB and the national central banks of the 27 Member States of the European Union (EU).

Central bank governors are in charge of monetary policy. Their staff conduct macroe-conomic research and, in some countries, oversee the banking system. Central banks employ many economists. The leadership of central banks therefore has a large impact on economic policy, but also on the careers of many economists.

Among the 179 central bank governors, we find 21 women, resulting in a share of 11.7 % women governors. For the countries that belong to the OECD, the share of women governors increased to 10.5 % due to the appointment of a female central bank governor in Turkey. For the countries of the ESCB, the share remains similar to past years at 3.6 %. Christine Lagarde, who is the head of the ECB, continues to be the only female governor in the ESCB system.

#### 6.3 Women as finance ministers

We examine the government cabinets of all countries in the world (based again on the list of countries provided by the BIS) and identify their finance ministers. In case of uncertain or ambiguous cabinet titles, we analyse the tasks related to each position and pick the cabinet position in charge of public finances.

We identify 176 relevant ministers, of which 29 are women, resulting in a share of 16.5 %. This value is slightly higher than in 2022 (14.8 %). In the OECD countries, we find a share of 29.7 % women finance ministers. In the EU countries the share is 25.9 %.

# 6.4 Women on economic advisory councils

The third statistic of the public sector includes the share of women on economic advisory councils. These are typically expert councils staffed by economists or people with relevant practical experience. Not every country has an economic expert council and functions and competences of the respective bodies vary between countries. To



create a list of councils for our analysis, we conduct an online search for each country, searching for "economic council", "advisory council" and "economic advisory council". We included all councils that have the task of actually advising policy makers about the economic situation, while councils exclusively negotiating wages or supporting businesses were excluded. In addition, we use the website of the International Association of Economic and Social Councils and Similar Institutions (https://aicesis.org/en/). This way, we obtain a list of 90 economic advisory councils, which is larger than the list of councils we have found in previous years.

The composition of the councils differs substantially between countries, from one advisor in Egypt to a body of 246 advisors in Brazil. Around half of the investigated councils (22 councils) range between 10 and 20 members. The share of women economic advisors varies from 0 % to 60 %. The average share of women across economic advisory councils, weighting each country equally, is 21.4 %. This is less than the 24.2 % in 2022 and substantially less than 29.3 % in 2021, but is in part explained by the larger number of councils included in our analysis this year.

#### 6.5 Women as chief economists of international institutions

The fourth indicator of the public sector is the share of women in important positions in international economics institutions. The selection of relevant international institutions that operate in the field of economics and economic policy 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. A detailed list of the selected organisations and respective roles is provided in Table 6.

When available, we choose the position of chief economist. If no chief economist position can be identified, we use comparable, typically research oriented positions whenever possible. For the United Nations Conference on Trade and Development (UNCTAD), we select three positions that are equal in importance and concerned with relevant economics topics: the directors of the Division on Investment and Enterprise, the Division on Globalization and Development Strategies, and the Divison on International Trade and Commodities. We weight observations such that each institution enters the index with equal weight.

In total, we cover 22 positions at 20 institutions. Of these positions, 5 are filled with



women. Weighting each institution equally, we find a share of women of 22.7 %. This seems like a sharp increase from 15 % last year, but it is similar to the value from 2021 (23.8 %). In fact, 3 out of the 5 organisations with female chief economists in 2023 already employed female chief economists in 2021.

#### 6.6 The WiE Index 2023 - Public Sector

Figure 11 gives an overview of the four different components taken into account for the Public Sector in the WiE Index 2023.

We construct the WiE Index 2023 for the public sector as described in section 2. The unweighted average of our indicators, the share of women among central bank governors, finance ministers, economic advisory councils, and economics institutions is 18.1 % (2022: 16.2 %). This corresponds to a value of 36 for the WiE Index (Figure 12). This value is higher than last year, but still one point below the value for 2021 and the trend from previous years. The rebound is mostly driven by the increase in the share of women in positions in international institutions back to 2021 levels.



Figure 11: Components of the Public Sector

# 6.7 Supplementary statistics

To provide a more comprehensive overview of the representation of women economists in the public sector, some further statistics are presented. These statistics do not enter the calculation of the WiE Index, but are shown as a complement.



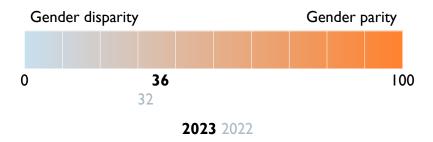


Figure 12: WiE Index - Public Sector

#### Regional analysis of women as governors of central banks

The list of regions for our regional analysis is taken from the World Bank. With Victoria Rodríguez Ceja becoming the head of Banco de México, one in three central banks in North America is now led by a woman. Consequently, North America has become the region with the highest proportion of women central bank governors. This position was previously held by South and Central America, which now ranks second. The lowest share is observed in Africa, with only 4.3 %. The exact numbers are displayed in Table 4.

Table 4: Summary statistics of central bank governors by region

	Gender					
	Women		M	en	То	tal
	No.	%	No.	%	No.	%
Groups						
ESCB	I	3.6	27	96.4	28	100
OECD	4	10.5	34	89.5	38	100
Regions						
Africa	2	4.3	45	95.7	47	100
Asia	3	7.0	40	93.0	43	100
Europe	8	17.0	39	83.0	47	100
North America	- 1	33.3	2	66.7	3	100
Oceania	1	12.5	7	87.5	8	100
South and Central America	6	19.4	25	80.6	31	100
Total	21	11.7	158	88.3	179	100

<sup>11</sup> See The World Bank (2022).



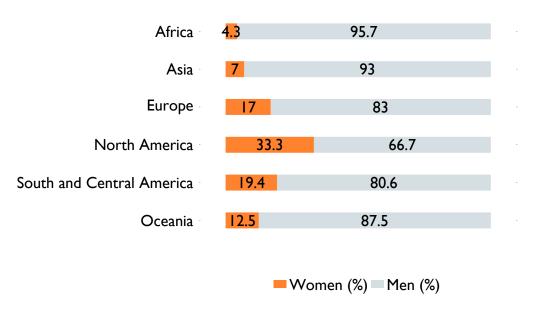


Figure 13: Women as governors of central banks by region

# Regional analysis of women as finance ministers

The same regional analysis is undertaken for finance ministers. The share of women is highest in Oceania, Europa and especially North America with 66.7 % (see Figure 14). This is driven by the United States and Canada, both having a woman as finance minister. For the year 2023, the lowest share of women among finance minister is observed in Asia, with only 6.7 %.

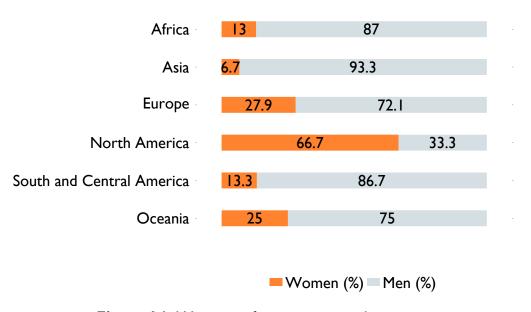


Figure 14: Women as finance ministers by region



 Table 5: Summary statistics Public Sector

			Ger	nder		
	Women		M	Men		tal
	No. %		No.	%	No.	%
Public Sector						
Central bank governors	21	11.7	158	88.3	179	100
Finance ministers	29	16.5	147	83.5	176	100
Economics advisory councils*	441	20.1	1750	79.9	2191	100
Economics institutions	5	22.7	17	77.2	22	100
Central bank governors by region						
ESCB	27	96.4	I	3.6	28	100
OECD	34	89.5	4	10.5	38	100
Africa	2	4.3	45	95.7	47	100
Asia	3	7.0	40	93.0	43	100
Europe	8	17.0	39	83.0	47	100
North America	1	33.3	2	66.7	3	100
Oceania	I	12.5	7	87.5	8	100
South and Central America	6	19.4	25	80.6	31	100
Total	21	11.7	158	88.3	179	100
Finance ministers by region						
EU	7	25.9	20	74.1	27	100
OECD	11	29.7	26	70.3	37	100
Other	18	13.4	116	86.6	134	100
Africa	6	13.0	40	87.0	46	100
Asia	3	6.7	43	93.3	46	100
Europe	12	27.9	31	72. I	43	100
North America	2	66.7	I	33.3	3	100
Oceania	2	25.0	6	75.0	8	100
South and Central America	4	13.3	26	86.7	30	100
Total	29	16.5	147	83.5	176	100

<sup>\*</sup> Summary statistics for members of advisory councils and leaders of economics institutions are reported unweighted here.

# Overview of sampled international economic institutions

Table 6 lists the institutions and positions that we have selected for the international institutions component.



Table 6: Overview of sampled economic institutions

Institution	Position				
Women	5				
Asia-Pacific Economic Cooperation European Bank for Reconstruction and Development	Program Director Economic Committee Chief Economist				
European Investment Bank	Chief Economist, Director of Economics Department				
Organization for Economic Cooperation and Development	Chief Economist				
United Nations Conference on Trade and Development	Director, Division on International Trade and Commodities				
Men	17				
African Development Bank	Chief Economist and Vice President, Economic Governance and Knowledge Management				
Asian Development Bank	Chief Economist and Director General				
Asian Infrastructure Investment Bank	Chief Economist				
Bank for International Settlements	Economic Advisor and Head of Research				
Economic Cooperation Organization	Deputy Secretary General (Trade and Investment, Agriculture & Industries (ATI)) since December 2021				
Food and Agriculture Organization of the United Nations	Chief Economist				
Interamerican Development Bank	Chief Economist and General Manager of the Research Department				
International Labor Organization	Director of the Research Department				
International Monetary Fund	Economic Counsellor and Director of Research Department				
Islamic Development Bank	Vice President, Country Programmes				
Mercosur (Mercado Común del Sur)	Director				
New Development Bank	Chief Economist				
Shanghai Cooperation Organization	Secretary-General				
United Nations Conference on Trade and Development	Director, Division on Investment and Enterprise				
United Nations Conference on Trade and Development	Director, Division on Globalization and Development Strategies				
World Bank Group	Senior vice President for Development Economics and Chief Economist				
World Trade Organization	Chief Economist, Director Economic Research and Statistics Division				
Total	22				

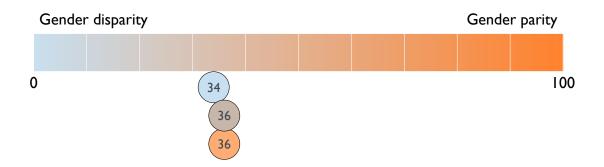
Note: We included three positions for the United Nations Conference on Trade and Development. Therefore, we count overall 22 positions, but only 20 institutions. Positions are weighted such that the WiE Index gives equal weight to each of the 20 institutions.



# 7 Conclusion and outlook

The WiE Index 2023 finds that women economists' representation in leadership positions continues to be low in all three sectors, i.e. the academic, the public and the private sector. For convenience, we reprint the index values of the WiE Index 2023 below (see Figure 15): the WiE Index 2023 amounts to 34 index points in the academic and 36 in both the private and the public sector. Compared to last year, we find an increase in the index values for the academic, private and public sectors of I, 3 and 4 points, respectively. Thus, for the first time compared to previous editions of the WiE Index, a general improvement in women's representation in leadership roles in economics can be observed.

Our work complements efforts in highlighting women's under-representation in society in general, be it across different economic activities, academic disciplines, in politics and/or culture. Future editions of the WiE Index will show how the representation of women economists in different leadership roles develops in the next years. WiE will continue to explore economics through the lens of gender. We hope that our work, including the WiE Index, will raise awareness for existing imbalances and disparities, inform important conversations, and initiate action towards a more equitable society. We remain committed to the vision of a world in which everyone can realise their potential. We contribute towards this end in the field of economics.



Academic Sector Private Sector Public Sector

Figure 15: WiE Index 2023

<sup>12</sup>See for instance UN Women (2020) for a global collection of data representing women in societies.



# References

- Auriol, E., Friebel, G., Weinberger, A., and Wilhelm, S. (2022). Underrepresentation of women in the economics profession more pronounced in the United States compared to heterogeneous Europe. *Proceedings of the National Academy of Sciences*, 119(16):e2118853119.
- Bank for International Settlements (2022). Central bank and monetary authority websites. Available at: <a href="https://www.bis.org/cbanks.htm">https://www.bis.org/cbanks.htm</a>. Last accessed on November 16th 2022.
- CitEc (2023). CitEc: Citation in Economics. Available at: http://citec.repec.org/. Last accessed on October 27th 2023.
- Fortune Media (2023). Global 500. Available at: <a href="https://fortune.com/global500/">https://fortune.com/global500/</a>. Last accessed on October 4th 2023.
- IDEAS (2023a). Top 10% Authors (Last 10 Years Publications), as of May 2023. Available at: https://ideas.repec.org/top/old/2305/top.person.all10.html. Last accessed on July 6th 2023.
- IDEAS (2023b). Top 25% Think Tanks (All authors, All publication years). Available at: <a href="https://ideas.repec.org/top/top.ttanks.html">https://ideas.repec.org/top/top.ttanks.html</a>. Last accessed on October 27th 2023.
- IDEAS (2023c). Top authors by region. Available at: https://ideas.repec.org/top/old/2305/#authorsregion. Last accessed on July 6th 2023.
- IDEAS (2023d). Top Young Economists, as of May 2023: Top 200 Economists (10 years or less). Available at: <a href="https://ideas.repec.org/top/old/2305/top.young.html">https://ideas.repec.org/top/old/2305/top.young.html</a>. Last accessed on July 6th 2023.
- QS Quacquarelli Symonds Limited (2023). QS World University Rankings 2023 (Economics and Econometrics. Available at: https://www.topuniversities.com/university-rankings/university-subject-rankings/2023/economics-econometrics. Last accessed on September 25th 2023.
- The World Bank (2022). World Bank Country and Lending Groups. Available at: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups. Last accessed on November 16th 2023.



UN Women (2020). Visualizing the data: Women's representation in society. Available at: https://www.unwomen.org/en/digital-library/multimedia/2020/2/infographic-visualizing-the-data-womens-representation. Last accessed on October 24th 2020.



#### December 2023

#### Authors:

Dorothee Buehler, Carolin Formella, Qquillaccori García, Sandra Kretschmer, Johanna Raith, Arnim Seidlitz, Yashveer Singh, Virginia Sondergeld, Yuki Takahashi, Insa Weilage and Kaneta Zillur.

Contact persons for this publication:

Sandra Kretschmer sandra@women-in-economics.com
Virginia Sondergeld virginia@women-in-economics.com

We strive for accuracy and rigorously check our work, but cannot exclude the possibility of errors. We are grateful for constructive suggestions and comments.

©All rights reserved 2023 The Women in Economics Initiative e.V.