

The Women in Economics Index 2020

Foreword

Dear reader,

I am very happy to present you with the second iteration of the Women in Economics Index, a statistical survey by The Women in Economics Initiative, studying the gender balance in the economics profession. Once again, we find that women are woefully underrepresented in many leadership positions for economists.

The Women in Economics Initiative has grown as an organisation over the past year and so has the ambition and scope of our research. We reflected upon the publication of the previous year and learned from our experiences. This led us to expand the Women in Economics Index with multiple new indicators and more detailed data. We hope that this data will contribute to a constructive debate, in society at large, but in particular among economists, about barriers to gender equality in the economics profession.

This past year has seen important conversations in professional bodies about cultural problems in our profession. This includes, but is not limited to, increased awareness of the impact that sexual harassment has on our professional environment. These conversations also transcend the issue of gender equality and, in particular this year, also focus on racial discrimination. I believe that addressing these issues is of interest to all economists. Everyone benefits from an intellectual climate that is free of prejudice and discrimination. Economics as a discipline will be able to serve society best when we recognize and foster talent of every kind.

More than in our debut a year ago, this piece of research has been the child of many involved contributors whom I would like to thank. In a year of uncertain and difficult working conditions, I could rely on the contribution of nine highly motivated and dedicated researchers that helped improve the Women in Economics Index, discussed its contents, methodology, and presentation, and collected data. Further thanks go to all the other members of The Women in Economics Initiative that helped with editing this publication and offered advice.

You now have the opportunity to act on what you see. Challenge your own assumptions, question your priors, and be an agent of change in economics. Please do get in touch with your comments and thoughts.

Philip Hanspach (Head of Research, co-founder)



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I Executive summary

The Women in Economics Index (WiE Index) monitors and tracks the share of women economists in senior positions in the academic, private, and public sectors globally. This share is converted to an index value 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. This publication continues the WiE Index 2019.

The key result of the WiE Index 2019 was an overall low share of women across sectors, especially in the indicators of the Academic Sector Pillar. This finding persists in the WiE Index 2020. Again, women remain underrepresented especially at the top of the economics profession. The index values for the academic, private, and public sectors are 31, 35, and 38.

Changes in individual indicators, some moving towards a more balanced gender representation, others not, sum up to small changes in the index value for the private and public sector. The index value for academia changed substantially, from 18 to 31. However, this year we expanded all indicators, including more data or adjusting the methodology for better world-wide comparisons. We provide like-for-like comparisons that indicate no increase in the share of women also in academia. A low overall share of women in leadership positions in economics and little overall movement since last year are our key findings.

Supplementary statistics provide a more nuanced view of gender equality in economics, especially along the geographic dimension. The Spotlight section, our look at a specific region, focuses on Scandinavia. We find a share of women among top authors of economic literature in Scandinavia that is almost twice as great as in the global overview, and more than twice as large as Europe in total. In general, North America, Europe, and Asia have a particularly low share of women authors compared to Africa. For central bank governors, South America and the Caribbean have the highest shares of women. As for chief economists in the private sector, North American companies employ a greater share of women than those in Europe, Central Asia or East Asia and the Pacific.



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 balanced representation of genders in the economics profession across the academic, business, and public sectors. This includes highlighting the contributions that women make to economic research, its application through policy, and the professional representation of women in senior leadership positions.

How do we pursue it? The annual WiE Index monitors and tracks the share of women economists in senior positions across key academic institutions, the private, and public sectors globally. With the first report released in 2019, each year we will continue to collect data, aggregate them into an index and publish a summary of our findings. In this way we aim to assess the development of women's representation in leadership roles in the economics profession over time and publish the results in order to further transparency and constructive dialogue.

What does the WiE Index consist of? The WiE Index consists of three sections, which we call pillars, representing the most important areas where many economists are employed and where economic research takes place. These are, in alphabetical order:

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

For each of these pillars, the WiE Index provides an annual snapshot of the representation of women in senior positions.

For the Academic Sector Pillar we analyze 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 Pillar investigates the chief economists of the largest companies worldwide, as well as chief economists of banks and insurance companies separately. The Public Sector Pillar takes into account governors of central banks, finance ministers, economic advisory councils, and chief economists of international economic institutions. We also provide supplementary statistics that do not enter the calculation of the WiE Index but provide a clearer



picture. The data have been collected over the summer of 2020. July 31st 2020 is the reference date for the new data presented in this report unless noted otherwise.

What is our methodology? In each section, we take the unweighted arithmetic mean of the percentage shares of women for the relevant indicators. Then we compute the difference to parity (50 % male and 50 % female). 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 %, or 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.

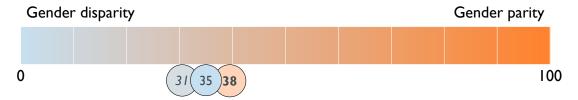


3 The Women in Economics Index 2020

The WiE Index 2020 for the academic, private, and public sectors evaluates to 31, 35, and 38 points, respectively. The corresponding values in 2019 were 18, 35, and 39. Overall, this indicates that only a small share of leadership positions in economics are held by women. For example, even the 38 points in the Public Sector Pillar translate to an average share of women across our indicators of just about 19 %.

This year's WiE Index contains some major changes compared to the previous issue. While it makes comparison with last year more difficult, we believe this sets us up with a better set of indicators and data sources for the future. Last year we found that the share of women within our chosen indicators in the private and public sector was much higher than in academia. The absolute numbers of the WiE Index 2019 and 2020 are not completely comparable, but we provide like-for-like comparisons where possible.

We also continue our "Spotlight" which provides additional data on some countries. Last year that was the German-speaking countries (DACH), for which we provide updates, this year it is the Scandinavian countries. Section 4 presents the Academic Sector Pillar, section 5 presents the Private Sector Pillar, and section 6 presents the Public Sector Pillar.



Academic Sector Pillar Private Sector Pillar Public Sector Pillar

Figure I: WiE Index 2020



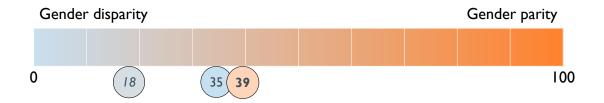


Figure 2: WiE Index 2019

Academic Sector Pillar Private Sector Pillar Public Sector Pillar



4 Academic Sector Pillar

The Academic Sector Pillar is composed of three different indicators to measure the representation of women economists in academia: the share of women among top authors of economics literature, the share of women among leaders of top economics think tanks, and the share of women among the faculty members of top economics departments.

4.1 Methodology

Compared to the previous year, the Academic Sector Pillar of the WiE Index 2020 provides plenty of additional information. Last year we considered the top 10 economics departments, this year we consider the 25 top economics departments and additional statistics on the top departments for each region of the world. For the first time, we offer a geographical breakdown of authors and faculty members for different regions: Africa, North America, Latin America, Asia, Europe, and Oceania. For both of these indicators, we notice that Africa is closest to gender parity, while Europe, Asia and North America are the regions with the greatest gender disparities.

We present an update on last year's Spotlight section which covered additional statistics for the German-speaking countries Germany, Austria, and Switzerland (DACH). We find that the share of women among top authors increased from 5 % to 9 %, while the share of female faculty members decreased from 22 % to 15.79 %. This year's Spotlight is on top authors from Scandinavian countries (Norway, Sweden and Denmark), which are sometimes regarded as leaders in gender equality. There, we also find a share of 9 % of women among top authors of economics literature, almost double the share of women among top authors worldwide (5 %).

A key change in the methodology from last year is that the indicator regarding women at top faculties now takes into account all faculty members listed by a department, rather than full professors. The diversity of university hierarchies worldwide made this change necessary. We also increased the number of think tanks that we sample to make this indicator more informative.



4.2 Women as top authors of economics literature

The first statistic considers the share of female authors among the top 100 of the IDEAS/RePec ranking as of April 2020, which considers 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 project. While the RePEc database of authors is not a complete sample of all academic economists in the world, it is the most complete effort at 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. We calculate the share of women among them. Of the first 100 authors, five are women, resulting in a share of 5 % for this indicator. This share decreased by one percentage point compared to the previous year, when it stood at 6 %.

4.3 Women as leaders of top economics think tanks

The second indicator considers the share of women leaders of economics think tanks. We look at all 56 think tanks listed in the ranking "Top 25 % Think Tanks, all authors, all publication years" by IDEAS/RePEc (as of April 2020). Economics think tanks are important institutions for economic research and large employers of economists. They advise governments, public and private sector institutions. We calculate the share of women in the most senior position, such as director, CEO, president. Each think tank counts equally even when it has several leading positions. We collected this information by using public sources, including the websites of think tanks, press releases, and media reports. Where necessary, we complemented this information by reaching out directly to think tanks when no information could be found in public sources. Overall, 5 think tanks for which no public information was available did not reply to us. This brings our sample size to 51. Out of the 51 think tanks for which we have data, 5 had one woman amongst 3 leaders, 6 had one woman amongst 2 leaders and 6 had a woman in a unique leading position. 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). Overall, the weighted share of women leaders among the top 25 % think tanks rounded to one decimal is 20.9 %.

For a like-for-like comparison with the WiE Index 2019, we restrict the sample to the

¹See IDEAS (2020a).

²See CitEc (2020).

³See IDEAS (2020d).



top 25 think tanks and we find 2 think tanks with a woman in the most senior position, a share of 8 %. This share remains unchanged from the previous year.

4.4 Women as faculty members of top economics departments

We also investigate the share of faculty members at the world's top 25 economics departments who are women, taken from the QS World University Ranking 2020, a well-known, publicly available ranking of universities that also allows selecting top departments in separate fields.⁴ For this indicator, we are looking at the list of faculty members provided by each university. For the total members of the top 25 economics faculties world-wide, we identified 303 women among 1,513 faculty members, resulting in a share of circa 20 %. For comparison purposes with last's years index, we also identified the share of women in the top 10 economics departments. We find a share of circa 18 %, which is one percentage point below the result of the WiE Index 2019, at 19 %. The composition of those universities remained the same between last year and now.

4.5 The WiE Index 2020 - Academic Sector Pillar

Figure 3 summarises the shares of women and men across the indicators "top authors", "leaders of top economics think tanks", and "faculty of top economics departments". These shares form the base components for the Academic Sector Pillar of the WiE Index 2020.

We construct the WiE Index 2020 for the Academic Sector Pillar as described in section 2. The average share of women among top authors, leaders of think tanks, and faculty members across indicators in the Academic Sector Pillar is 15.3 % in 2020. This corresponds to a value of 31 on the WiE Index (Figure 4).

As mentioned in section 3, the value for the WiE Index 2019 of the Academic Sector Pillar was 18. The significant difference of 13 percentage points is mostly due to a change in methodology and sample sizes, which we accepted in order to obtain a larger and more robust sample.

⁴See QS Quacquarelli Symonds Limited (2020).



In fact, if we had calculated last year's index with faculty members instead of full professors, we would have obtained a value of 22. Furthermore, if this year we had the same restricted sample sizes as last year, the index value would be 21. That is to say, when we recalculate the index of both years for a like-for-like comparison (considering the share of women in the top 100 authors of economic literature, the women as leaders on the top 25 economic think tanks and the women as faculty members of the top 10 economic departments), the index falls by one point.

This like-for-like comparison helps to put the effect of the changes in methodology into perspective. It also illustrates differences that arise from looking only at the very top of the rankings versus including other highly ranked universities and institutions below the very top. The WiE Index 2020 expands the sample both qualitatively and quantitatively, leading to an increased index value. This can be understood as an indication of lower female representation at the very top rungs of the profession, as opposed to more gender diversity when taking into account faculties and think tanks below the very top.

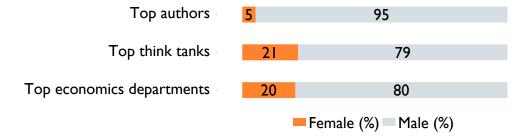


Figure 3: Components of the Academic Sector Pillar

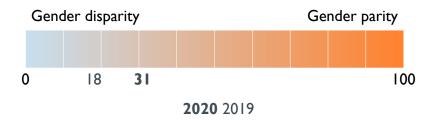


Figure 4: WiE Index - Academic Sector Pillar

4.6 Supplementary Statistics

Several statistics are added to give additional insights on the representation of women economists in academia. These statistics do not enter the calculation of the WiE



Index, but are presented as a complement.

Women as top young authors

We consider the share of women among top young authors of economics literature in the ranking of the top young economists by RePEc as of April 2020.⁵ This ranking considers economists whose first publication of any kind dates from 10 years or less. Only the first 100 authors of this ranking are analyzed. Among them, fifteen are women, resulting in a share of 15 % of women among top young economists.

Spotlight

Our Spotlight is on the share of women among top authors in Scandinavian countries. We count the first 100 entries of the RePEc ranking of the top 25 % authors as of April 2020 in Norway, Sweden and Denmark.⁶ In Norway, we count eight women. In Sweden, we count seven women. In Denmark, we count twelve women, resulting in shares of 8, 7, and 12 %, respectively. Considering the Scandinavian region entirely, we count 27 women out of the first 300 top authors, resulting in a share of 9 % of women among top authors of economics literature.

We also follow up on the Spotlight section of the WiE Index 2019. The data is taken from the German Handelsblatt Ranking 2019 for the DACH region (Germany, Switzerland and Austria), which was published by the German business daily Handels-blatt after the WiE Index 2019 had been completed.⁷ The WiE Index 2019 had relied on the previous iteration of the Handelsblatt Ranking, dating from 2017. The ranking of authors based on their publications of the last 5 years is examined. We count nine women out of the first one hundred authors, resulting in a share of 9 % of women, a marked increase over the 5 % in the WiE Index 2019.

We also followed up on the top faculties in the DACH region. We compare the share of female faculty members for the top universities according to the latest Handelsblatt Ranking with the number of top faculties according to the previous ranking. Using the lists of faculty members provided by these departments on their websites, we find that 57 of 361 faculty members were women, a share of circa 16 %. In last year's index and accordingly the previous ranking this share reached 22 %.

⁵See IDEAS (2020e).

⁶See IDEAS (2020c), the corresponding ranking for each country can be found under 'Top authors by country'.

⁷See Handelsblatt (2019).



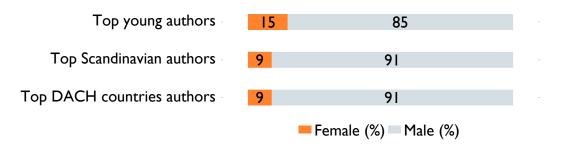


Figure 5: Supplementary statistics - Academic Sector Pillar

A comparison between the regions of the world: Africa, Asia, Europe, Latin or South America, North America and Oceania

This year the WiE Index covers further information on the representation of women in economics in different regions of the world. Those statistics are included as additional information, and do not enter in the calculation of the index for the Academic Sector Pillar.

Women as top authors of economics literature by region

We consider the RePEc rankings by region as of April 2020.⁸ We look at the following regions: Africa, Asia, Europe, North America, South America, and Oceania. As no ranking for North America exists, we combine the top one hundred authors of the RePEc ranking for the USA and the top one hundred authors for Canada to calculate a share for North America.

For Africa, we count sixteen women out of the first one hundred top authors, resulting in a share of 16 % of women among top economists. For Asia, we count five women out of the first one hundred top authors, resulting in a share of 5 % of women among top economists. For Europe, we count four women out of the first one hundred top authors, resulting in a share of 4 % of women among the top economists. For Canada, we count five women out of the first one hundred top authors, resulting in a share of 5 % of women among top economists. For the USA, we count six women out of the first one hundred top authors, resulting in a share of 6 % of women among top economists. Combining these statistics to get the share of women economists in North America, we count eleven women out of the first two hundred top authors, resulting in a share of 5.5 % of women among top economists. For South America, we count seven women out of the first one hundred top authors, resulting in a share of 7 %

⁸See IDEAS (2020b), the corresponding ranking can be found under 'Top authors by region' and 'Top authors by country'.



of women among top economists. For Oceania, we count nine women out of the first one hundred top authors, resulting in a share of 9 % of women among top economists.

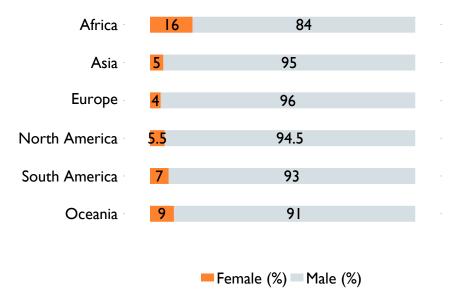


Figure 6: Women as top authors by region

We can observe that for the top 100 authors of each region, the highest share of women is found in Africa, followed by Oceania and South America. North America, Asia, and Europe complete the list with the lowest share of women among top authors of economics literature.

Women as faculty members of top economics departments by region

To study the situation of the share of women researchers among the top 5 economics departments of the world's different regions, we used the QS World University Rankings 2020 for "Economics & Econometrics" as in the previous year.

For the top economics departments in Africa, we count 166 researchers, from which 59 are women, resulting in a share of circa 35 %. For Asia, we count 50 women among the 233 researchers of four out of the top economics departments. This results in a share of circa 21 %. From the top 5 economics departments in Europe, we identify 63 women among 271 researchers, a share of circa 23 %. From the top 5

⁹We excluded one observation from the analysis due to missing data. A request by WiE for information was not answered.

¹⁰We excluded one observation from the analysis due to missing data. A request by WiE for information was not answered.



economics departments of Latin America, we found that among 252 researchers 71 are women, resulting in a share of circa 28 %. From the top 5 economics departments of North America, we identify 48 women among a total 265 researchers, a share of circa 18 %. For Oceania, we identified 92 women out of the 332 observations of the top 5 departments in economics, resulting in a share of circa 28 %.

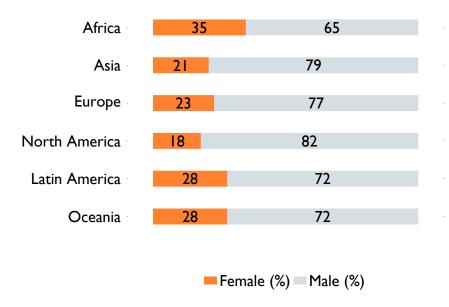


Figure 7: Women as faculty members of top economics departments by region

We can observe that for the top departments of every region, Africa has the highest share of women, followed by Latin America and Oceania, then Europe, and North America with the lowest share of women at the top departments.



Table I: Summary statistics Academic Sector Pillar

			Ge	nder		
	Male		Female		То	tal
	No.	%	No.	%	No.	%
Academic Sector Pillar						
World top 100 authors	95	95.0	5	5.0	100	100.0
World top 25 departments	1,210	80.0	303	20.0	1,513	100.0
Top think tanks	52	75. 4	17	24.6	69	100.0
Spotlight						
Scandinavia - authors	273	91.0	27	9.0	300	100.0
DACH - authors	91	91.0	9	9.0	100	100.0
DACH - faculty	304	84.2	57	15.8	361	100.0
Young authors	85	85.0	15	15.0	100	100.0
Regional top authors						
Africa	84	84.0	16	16.0	100	100.0
Asia	95	95.0	5	5.0	100	100.0
Europe	96	96.0	4	4.0	100	100.0
North America	189	94.5	Ш	5.5	200	100.0
Oceania	91	91.0	9	9.0	100	100.0
South America	93	93.0	7	7.0	100	100.0
Total	648	92.6	52	7.4	700	100.0
Pooled total	1,033	91.6	95	8.4	1,128	100.0
Regional top departments						
Africa	108	64.7	59	35.3	167	100.0
Asia	183	78.5	50	21.5	233	100.0
Europe	208	76.8	63	23.2	271	100.0
Latin America	181	71.8	71	28.2	252	100.0
North America	217	81.9	48	18.1	265	100.0
Oceania	240	72.3	92	27.7	332	100.0
Total	1,137	74.8	383	25.2	1,520	100.0
Pooled total	1,767	77.3	519	22.7	2,286	100.0

Notes: Summary statistics for leaders of think tanks are reported unweighted here.

The pooled total for top departments and top authors aggregates over all regional and global rankings that are presented in the report. We remove duplicates, but do not weight the data in any way. Accordingly, the simple mean of the pooled totals is influenced by regional foci, e.g. the Spotlight, or the prevalence of US departments among the top 25 departments.



5 Private Sector Pillar

For the Private Sector Pillar, we survey the share of female chief economists of the largest companies worldwide, as well as chief economists of banks and insurance companies. The choice of indicators is therefore identical to the WiE Index 2019. It is motivated by the fact that in the banking and insurance industries, large firms typically employ research economists, whereas in other sectors, only the largest companies will employ dedicated research economists. Chief economists typically oversee teams dedicated to economic research and advise the corporate leadership on economics-related questions. The WiE Index for this pillar is based on the mean share of female chief economists in these three categories. Moreover, we provide a geographical breakdown of the aggregated numbers.

5.1 Methodology

We identify the largest companies (by revenue) from the Global 500 ranking provided by Fortune Media (2019). This is a slight deviation from last year where different rankings were consulted to select the largest banks and insurance companies. The list of banks and insurances that were ultimately sampled did, however, barely change. We are confident that moving forward, this change will improve the WiE Index. From this ranking, we take the 100 largest firms by revenue, as well as all insurances and banks which are listed in the top 500. Individual firms might appear in two indicators if they are a bank or insurance that is also among the 100 largest companies. We sample a total of 191 companies for which we identify 81 chief economists.

We identified chief economists in two stages. First, we review websites, press releases, and news articles to identify the companies' chief economists. Afterwards, we contacted firms directly via e-mail to learn about their chief economist or confirm the information we found.

For the supplementary statistic on the regional distribution we grouped the companies according to the location of their headquarters. We are following the categories of the Fortune 500. Not only does this show the broad geographic areas covered by this indicator, but also helps identify variation across regions.



Table 3: Summary statistics Private Sector Pillar

	Gender					
	M	Male		Female		otal
	No.	%	No.	%	No.	%
Private Sector Pillar						
Banks	31	91.2	3	8.8	34	100.0
Insurance companies	8	80.0	2	20.0	10	100.0
General companies top 100	29	78. 4	8	21.6	37	100.0
Total	68	84.0	13	16.0	81	100.0
Regions						
Latin America	3	100.0	0	0.0	3	100.0
North America	17	73.9	6	26. I	23	100.0
Europe and Central Asia	27	81.8	6	18.2	33	100.0
East Asia and Pacific	20	95.2	I	4.8	21	100.0
South Asia	- 1	100.0	0	0.0	- 1	100.0
Total	68	84.0	13	16.0	8 I	100.0

5.2 Women as chief economists of global companies

Female economists only hold a minority of chief economist positions at large companies, especially in the banking industry. Figure 8 displays the components for the calculation of the WiE Index in the Private Sector Pillar. The share of female chief economists in insurance companies is 20 percent, 9 percent in banks, and 22 percent in the largest companies in general. Compared to last year, this is an increase in the insurance sector by 11 percentage points, but a decrease for both banks and the largest companies by 8 and 5 percentage points, respectively. These are large year-on-year changes compared to the other pillars, which are perhaps indicative of higher turnover in the private sector. One caveat to these results is that we use different data sources to identify the largest banks and insurance companies, although the actual composition of the sample is similar. In any case, this year's as well as last year's statistics clearly show the underrepresentation of female chief economists in major firms.

Out of the 81 chief economists we identified, 34, 10, and 37 are employed at banks, insurance companies, and other companies, respectively. We summarise the key results of the Private Sector Pillar in Table 3.



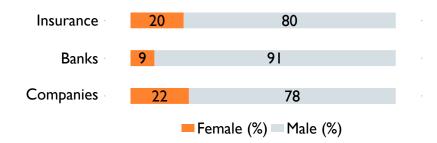


Figure 8: Components of the Private Sector Pillar

5.3 The WiE Index 2020 - Private Sector Pillar

The WiE Index for the Private Sector Pillar sums to 35 out of 100 points. Based on the indicator shares in Figure 8 we construct the WiE Index 2020 for the Private Sector Pillar as described in section 2. With a value of 35 points, the overall index value remains constant compared to last year. At the level of the WiE Index, the observed developments across the three categories (see Figure 9) cancel out.

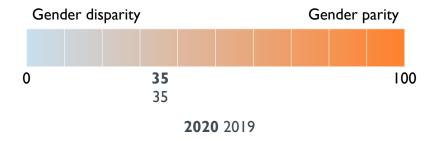


Figure 9: WiE Index - Private Sector Pillar

5.4 Supplementary statistics

In terms of regional distribution, about 95 % of the companies considered in our sample have their head office based in North America (28.4 %), Europe and Central Asia (40.7 %) or East Asia and Pacific (25.9 %).¹¹

Within the top three represented regions, East Asia and Pacific demonstrates the lowest share of female chief economists (5 %), while North America leads in terms of gender parity (26 %). In order to highlight regional differences we looked at the share of female chief economists by region as well (see Figure 10). East Asia and Pacific trails the list with only 5 % of female economists in leading positions. Europe and Central

¹¹Our definition of these regions follows the World Bank Country and Lending Groups classification (The World Bank 2020).



Asia is with a ratio of 18 % about 8 percentage points behind North America. As we look at the global top firms in terms of revenue across the world, this indicator mainly represents developed or emerging economies.

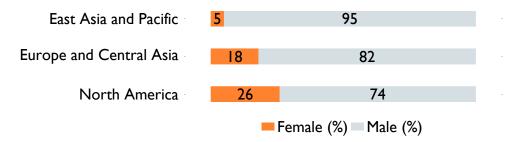


Figure 10: Women as chief economists of global companies by region



6 Public Sector Pillar

The Public Sector Pillar is composed of four different indicators: the share of women among governors of central banks, the share of women among finance ministers, the share of women in economic expert advisory councils and the share of women as chief economists of international economic institutions.

6.1 Methodology

For the first time this year, we added chief economists of international economic institutions as a fourth indicator to the pillar. We undertake this change in methodology in order to include institutions that are key in shaping economic decisions around the world and in which economists can bring in their expertise in leading positions. Besides this we also amended the existing indicators. This year we collected data on finance ministers instead of economic ministers for the analysis. Finance is a more consistent and universal government portfolio across the world. By contrast, dedicated economics ministries do not exist in all countries, or their portfolio is split across several cabinet positions, and their authority, budget and tasks are less comparable across countries. Finally, we sampled 17 economic expert advisory councils compared to only 3 in the previous year.

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 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. The BIS describes itself as a bank and service provider for central banks, fostering international cooperation. Their list currently includes 179 different countries and groups with their respective central banks, including the European Central Bank (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 together with the national central banks of the 27 Member States of the European Union (EU).

¹²See Bank for International Settlements (2020).



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. We find 14 women among 168 different governors of central banks, resulting in a share of circa 8 %. For the countries which belong to the OECD, we find a share of 0 %. For the countries of the ESCB this share is 3.5 %, up from 0 % last year. This reflects the appointment of Christine Lagarde as president of the European Central Bank. She took up this position in November 2019.¹³

6.3 Women as finance ministers

We examine the government cabinets of the countries that we sample for the first indicator and identify their finance ministers. In case of uncertain or ambiguous cabinet titles, we analyzed the tasks related to each position and picked the cabinet position in charge of public finances. We identify I75 relevant ministers, of which 20 are women, resulting in a share of circa II %. In OECD countries, we find the same proportion of women as finance ministers. For the countries of the EU, the proportion is I5 %, slightly higher than the global average.

6.4 Women as economic expert advisors

The third statistic of the Public Sector Pillar includes the share of women on economic advisory councils. These are typically expert councils staffed by economists or people with relevant practical experience. Extending the WiE Index 2019, we analyze 17 councils.

The composition of the councils differs substantially between countries, from one advisor in Egypt to a body of 108 advisors in Belgium. 10 of the investigated councils range between 5 and 10 members. The share of women economic advisors varies from 0 % in Egypt and Pakistan to 57.1 % in Canada. The average share of women across economic advisory councils, weighting equally each country, is 25.4 %.

6.5 Women as chief economists of international institutions

For the first time this year the share of women in important positions of economic institutions is included in the Public Sector Pillar. The selection of relevant international

¹³See European Central Bank (2020).



institutions is necessarily a judgement call. We include international public investment banks and organizations 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 organizations and respective roles is provided in Table 7.

When available we chose the position of chief economist. If no chief economist position could be identified, we used comparable, typically research oriented positions, whenever possible. For the United Nations Conference on Trade and Development (UNCTAD) we select three positions that all 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 Division on International Trade and Commodities. We weight observation such that each institution enters the index with equal weight (one of the three positions at UNCTAD is held by a woman).

In total, we cover 22 positions at 20 institutions. Of these positions, 7 are filled with women. Weighting each institution equally, we find a share of women of 31.6 %.

6.6 The WiE Index 2020 - Public Sector Pillar

Figure 11 gives an overview of the four different components taken into account for the Public Sector Pillar in the WiE Index 2020. The central bank governors, finance ministers, and economic expert advisory councils are now complemented by economic institutions.

We construct the WiE Index 2020 for the Public Sector Pillar as described above. The average share of women among central bank governors, finance ministers, economic advisory councils, and economic institutions is 19.2 % in 2020. This corresponds to a value of 38 on the WiE Index (Figure 12). Although we added one indicator and included a wider range of economic advisory councils, this value is very close to last year's index value of 39.

With a value of 38, the Public Sector Pillar decreases by one point compared to last year. We considered whether the changes in methodology have a big impact on the computed results. We find that when taking only the advisory councils from last year into the analysis, we find only a decimal change of the WiE Index. Also last year's



value for the share of women as ministers of economy is 12 % which is very close to this year's share of women as finance ministers of 11.5 %. This makes us confident that the changes in methodology do not distort our results and allow for a more comprehensive analysis.

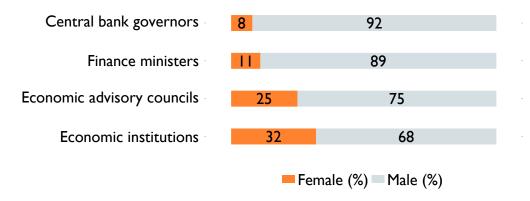


Figure 11: Components of the Public Sector Pillar



Figure 12: WiE Index - Public Sector Pillar

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.

Regional analysis of women as governors of central banks

Besides looking at the share in OECD and ESCB countries that can be seen in Figure 13, we extend the analysis to geographic regions. The list of regions is taken from the World Bank.¹⁴ The highest share of women as central bank governors can be found in Latin America and the Caribbean. In North America, Middle East and North Africa,

¹⁴See The World Bank (2020).



and South Asia no central banks are lead by a woman. The exact proportions are displayed in Table 4.

Table 4: Summary statistics of central bank governors

			Gei	nder		
	Male		Female		Total	
	No.	%	No.	%	No.	%
Groups						
ESCB	27	96.4	1	3.6	28	100.0
OECD	37	100.0	0	0.0	37	100.0
Other	122	90.4	13	9.6	135	100.0
Total	154	91.7	14	8.3	168	100.0
Regions						
Latin America and Caribbean	26	83.9	5	16.1	31	100.0
North America	3	100.0	0	0.0	3	100.0
Europe and Central Asia	46	90.2	5	9.8	5 I	100.0
East Asia and Pacific	22	91.7	2	8.3	24	100.0
Middle East and North Africa	20	100.0	0	0.0	20	100.0
South Asia	8	100.0	0	0.0	8	100.0
Sub-Saharan Africa	29	93.5	2	6.5	31	100.0
Total	154	91.7	14	8.3	168	100.0

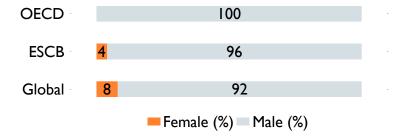


Figure 13: Women as governors of central banks - OECD and ESCB

Regional analysis of women as finance ministers

The same regional analysis is undertaken for the ministers of finance. The share of women as finance ministers in the EU is above the global average. Across the countries of the OECD this share is about the same as across all countries (see Figure 14). However, the highest share of women is seen in Latin America and the Caribbean. In North America as well as the Middle East and North Africa all ministers of finance are men, as shown in Table 5.



Table 5: Summary statis	tics ot finance	ministers
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	Gender					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Groups						
OECD	33	89.2	4	10.8	37	100.0
EU	23	85.2	4	14.8	27	100.0
Other	117	88.0	16	12.0	133	100.0
Total	155	88.6	20	11.4	175	100.0
Regions						
Latin America and Caribbean	21	72.4	8	27.6	29	100.0
North America	3	100.0	0	0.0	3	100.0
Europe and Central Asia	42	84.0	8	16.0	50	100.0
East Asia and Pacific	23	95.8	- 1	4.2	24	100.0
Middle East and North Africa	20	100.0	0	0.0	20	100.0
South Asia	7	87.5	- 1	12.5	8	100.0
Sub-Saharan Africa	39	95.I	2	4.9	41	100.0
Total	155	88.6	20	11.4	175	100.0

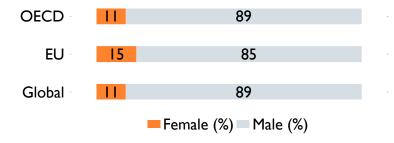


Figure 14: Women as finance ministers - OECD and EU

Women as economic expert advisors by country

In the additional analysis for the economic expert advisory councils we provide a more detailed view of the composition of the specific bodies. The councils are very heterogeneous in size and gender parity. It ranges from Egypt, where only one man has the role of economic advisor, to Belgium, where 68 men and 40 women constitute the Federal Economic Council. The highest share of women is found in Canada, where of their 14 members, 8 are women, representing a proportion of 57.1 %. In Figure 15 we visualize this data country-by-country. Additionally, in Table 6 we show the respective shares.



Table 6: Summary statistics of economic expert advisory councils

	Gender					
	Male		Female		Total	
	No.	%	No.	%	No.	%
Countries						
Belgium	68	63.0	40	37.0	108	100.0
Brazil	60	65.2	32	34.8	92	100.0
Canada	6	42.9	8	57. I	14	100.0
Egypt	1	100.0	0	0.0	I	100.0
France	П	55.0	9	45.0	20	100.0
Germany	3	60.0	2	40.0	5	100.0
India	6	85.8	-	14.2	7	100.0
Italy	51	77.3	15	22.7	66	100.0
Jamaica	8	80.0	2	20.0	10	100.0
Japan	10	90.9	-	9.1	- 11	100.0
Malaysia	П	68. 4	5	31.6	16	100.0
Maldives	7	70.0	3	30.0	10	100.0
Pakistan	18	100.0	0	0.0	18	100.0
South Africa	12	92.3	-	7.7	13	100.0
South Korea	16	59.3	П	40.7	27	100.0
Turkey	10	83.3	2	16.7	12	100.0
USA	12	75.0	4	25.0	16	100.0
Total	310	69.5	136	30.5	446	100.0

Note: The total percentage shares reported in this table refer to all members of economic expert advisory councils. The WiE Index is computed with the mean share across countries.

Overview of sampled international economic institutions

The newly investigated component of the Public Sector Pillar is international institutions. Table 7 lists the institutions and positions that we have selected for this purpose.



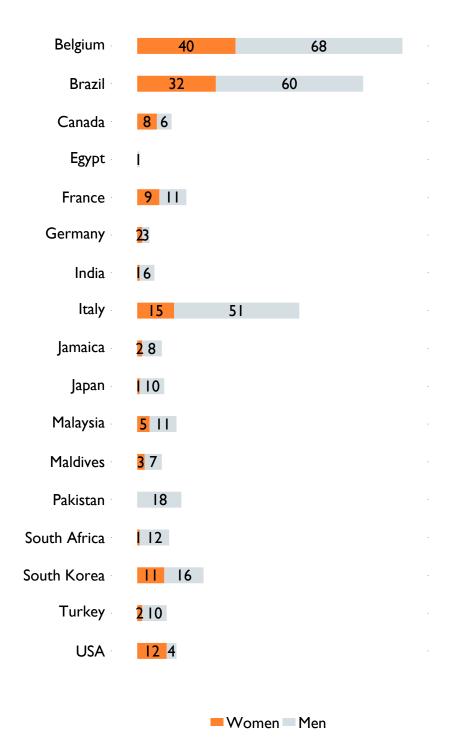


Figure 15: Women as economic expert advisors by country



Table 7: Overview of sampled economic institutions

Institution	Position
Men	15
African Development Bank	Chief Economist and Vice President, Economic Governance and Knowledge Management
Asian Development Bank	Chief Economist and Vice President, Economic Governance and Knowledge Management
Asian Infrastructure Investment Bank	Manager Economics Unit
Asia-Pacific Economic Cooperation	Program Director Economic Committee
Bank for International Settlements	Economic Advisor and Head of Research
Economic Cooperation Organization	Deputy Secretary General in charge of Trade and Investment (T&I) Direc- torate and Agriculture and Industry Di- rectorate
Food and Agriculture Organization of	Chief Economist
the United Nations	
Interamerican Development Bank	Chief Economist and General Manager of the Research Department
International Labor Organization	Director OIC of the Research Department
Islamic Development Bank	Vice President, Sector Operations
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 Trade Organization	Chief Economist and Director of the Economic Research and Statistics Division



Institution	Position			
Women	7			
European Bank for Reconstruction and	Chief Economist and Vice President,			
Development	Economic Governance and Knowledge			
	Management			
European Investment Bank	Chief Economist, Director of Economics			
	Department			
International Monetary Fund	Economic Counsellor and Director of			
	Research Department			
Mercosur (Mercado Común del Sur)	Directora			
Organization for Economic Cooperation	Chief Economist			
and Development				
United Nations Conference on Trade	Director, Division on International			
and Development	Trade and Commodities			
World Bank Group	Vice President and Chief Economist			
Total	22			

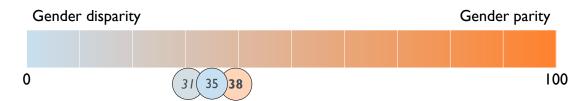
Note: We included three positions for the United Nations Conference on Trade and Development. Therefore, we count overall 22 positions, but only 20 institutions. Positions are weighted such that the WiE Index gives equal weight to each of the 20 institutions.



7 Conclusion and outlook

The WiE Index 2020 sheds light on the low share of women economists in senior positions. This observation holds for all assessed sectors (academic, public, and private). Within our chosen set of indicators, we find that the share of women is lowest in the academic sector, followed by the private sector. We find the highest share of women in the public sector. The lack of change since last year is another notable finding. For convenience, we reprint the index values of the WiE Index 2020 below (see Figure 16).

Our work complements wide efforts in highlighting women's underrepresentation 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 participation of women economists in different leadership roles will develop across the next years. WiE will continue to explore economics through the lens of gender. We hope that our research work, including the WiE Index, will raise awareness of existing imbalances and disparities, start important conversations, and initiate action towards a more equitable society. We remain committed to the vision of a world in which everyone can realize their potential. We contribute towards this end in the field of economics.



Academic Sector Pillar Private Sector Pillar Public Sector Pillar

Figure 16: WiE Index 2020

¹⁵See for instance UN Women (2020) for a global collection of data representing women in societies.



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

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