

Antezza, Arianna et al.

Working Paper

Which countries help Ukraine and how? Introducing the Ukraine Support Tracker

Kiel Working Paper, No. 2218

Provided in Cooperation with:

Kiel Institute for the World Economy – Leibniz Center for Research on Global Economic Challenges

Suggested Citation: Antezza, Arianna et al. (2022) : Which countries help Ukraine and how? Introducing the Ukraine Support Tracker, Kiel Working Paper, No. 2218, Kiel Institute for the World Economy (IfW Kiel), Kiel

This Version is available at:

<https://hdl.handle.net/10419/253672>

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KIEL WORKING PAPER

**Which countries help
Ukraine and how?**

**Introducing the Ukraine
Support Tracker**



No. 2218 April 2022

Arianna Antezza, André Frank, Pascal Frank, Lukas Franz, Ekaterina Rebinskaya and Christoph Trebesch

ABSTRACT

WHICH COUNTRIES HELP UKRAINE AND HOW? INTRODUCING THE UKRAINE SUPPORT TRACKER

*Arianna Antezza, André Frank, Pascal Frank, Lukas Franz,
Ekaterina Rebinskaya and Christoph Trebesch¹*

NOTE: This is the first version of the paper and database. In the coming days and weeks, we plan to continuously expand, correct, and improve this project. We therefore very much welcome any help to improve the tracker. Please send us feedback and comments to ukrainetracker@ifw-kiel.de

This paper introduces the “Ukraine Support Tracker”, which lists and quantifies military, financial and humanitarian aid to Ukraine since Russia’s invasion on February 24, 2022. We measure support from Western governments, namely by G7 and European Union member countries. Due to our focus on government-to-government commitments, we do not gather systematic data on private donations or aid by international organizations in this version of the database. To value in-kind support like military equipment or weapons, we use market prices and consider upper bounds to avoid underestimating the true extent of bilateral assistance. We find significant differences in the scale of support across countries, both in absolute terms and as percent of donor GDP. In total amounts, by far the largest supporter of Ukraine is the United States, followed by Poland and the United Kingdom. In percent of donor GDP, small Eastern European countries stand out as particularly generous. Strikingly, the United States alone provides more support to Ukraine than all of the 27 EU member countries taken together, even after adding EU-level support. The gap is particularly large for military support, with the US committing more than twice as much weapons and military equipment than all other countries combined.

Keywords: International aid, military aid, war, geoeconomics

JEL classification: F35, F51, H56, H63, H84, H81

Arianna Antezza

Kiel Institute and Humboldt University
Email: arianna.antezza@ifw-kiel.de

André Frank

Kiel Institute and Kiel University
Email: andre.frank@ifw-kiel.de

Pascal Frank

Kiel Institute and University of Würzburg
Email: pascal.frank@ifw-kiel.de

Lukas Franz

Kiel Institute for the World Economy
Kiellinie 66, D-24105 Kiel; Germany
Email: lukas.franz@ifw-kiel.de;
www.ifw-kiel.de

Ekaterina Rebinskaya

Kiel Institute for the World Economy
Kiellinie 66, D-24105 Kiel; Germany
ekaterina.rebinskaya@ifw-kiel.de
www.ifw-kiel.de

Christoph Trebesch

Kiel Institute for the World Economy
Kiellinie 66, D-24105 Kiel; Germany
Email: christoph.trebesch@ifw-kiel.de
www.ifw-kiel.de

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¹Corresponding author: Christoph Trebesch (christoph.trebesch@ifw-kiel.de), but ideally contact us at ukrainetracker@ifw-kiel.de. Further contact details: arianna.antezza@ifw-kiel.de; andre.frank@ifw-kiel.de; pascal.frank@ifw-kiel.de; lukas.franz@ifw-kiel.de; ekaterina.rebinskaya@gmail.com; christoph.trebesch@ifw-kiel.de.

1. Introduction

Russia's attack on Ukraine is causing staggering human suffering and destruction. Many Western leaders have pledged to "stand with Ukraine" and announced major military and humanitarian support. This paper asks: What do the numbers say? How large is the support for Ukraine? What are the most supportive governments? And what type of support do countries offer – military, humanitarian, and/or financial aid? To address these questions, we create a new database, the "Ukraine Support Tracker", which lists and quantifies the support of Western governments to Ukraine between February 24, 2022, the day of Russia's full-scale invasion, and March 27, 2022 (first version).

This project fills a gap in the economic discussion on the Russia-Ukraine war. Thus far, the debate has focused on sanctions and other measures to hurt Russia (e.g., Bachmann et al. 2022). Less attention has been devoted to measures to support Ukraine (one important exception being Becker et al. 2022). Indeed, most of the discussion on aid to Ukraine has been anecdotal, while systematic data and rigor has been missing. This is an important gap. Rather than choosing between an energy embargo or to remain passive, an important policy alternative (or complement) is to scale up monetary and military support to Ukraine. More support is an immediate way to alter the course of the war and help reduce human suffering.

The main aim of this database is to quantify the scale of aid to Ukraine and to make the support measures comparable across donor countries. Our aim is to quantify the support flows by Western governments to Ukraine in millions of Euros, accounting for both financial and in-kind transfers. To do so, we set up a comprehensive database that brings together information from official government sources, existing lists of Ukraine aid, and reports by renowned news media.

An important challenge is to quantify non-financial transfers, such as in-kind shipments of military equipment, weapons, medicines, or foodstuff. In many cases, governments report the value of their in-kind donations in their national currency, which we can use as the baseline value. In other cases, however, governments do not report the value of aid but only mention the items supplied, such as specific weapons or several "tons of foodstuff". We assign a monetary value to in-kind aid using market prices and data on previous instances of international aid deliveries, thus facilitating the comparison of assistance provided across countries.

We focus on bilateral (government-to-government) commitments. This means that not all types of support are covered, in particular not support to international organizations, non-governmental organizations (NGOs), or private donations. The available evidence suggests that private donations are sizable in some countries and can surpass the scale of support by governments. In Germany, for example, private donations for humanitarian aid to Ukraine exceed €631 million as of March 25 (according to DZI 2022, which gathers data on donations to 67 aid organizations and foundations). This sum is higher than the total amount of humanitarian aid promised (but not yet delivered) to Ukraine by German Chancellor Scholz on March 24.²

Importantly, we cannot provide a complete picture of aid, because some governments do not share details on their support to Ukraine, especially when it comes to sending military

² On March 24, 2022, German Chancellor Scholz announced that his government will provide humanitarian assistance to Ukraine that will reach the value of €370 million. We found evidence of about €40 million having been disbursed to Ukraine, but data is hard to find. Note also that part of the private donations may not fund projects in Ukraine proper, but in neighboring countries or for refugees outside of Ukraine.

equipment and weapons. However, we did our best to meticulously list and quantify all support measures that have become publicly known. This means that we also evaluate leaks of official documents, which list the type and value of military aid in detail, e.g. by Germany or Italy. Moreover, in many cases, weapon deliveries ultimately become public once they have been made, which allows tracking them ex-post.

According to the dataset, total *bilateral* commitments by the EU and G7 governments amounts to €13 billion the first month of the war (the current dataset spans February 24 until March 27, 2022). The United States (US) is the largest bilateral supporter of Ukraine and accounts for more than half of this total, with the equivalent of €7.6 billion committed. All EU countries combined total €2.9 billion in commitments, plus €1.4 billion from the EU Commission and a further €2 billion from the European Investment Bank. It is remarkable that the US alone is giving significantly more than the entire EU, in whose immediate neighborhood the war is raging. Not (yet) included are commitments by international organizations such as the IMF, the World Bank and the United Nations, but our preliminary data show additional commitments of at least €4 billion from these institutions.³

The remainder of the paper is structured as follows. Section 2 gives an overview of how we construct the database, focuses on bilateral (government-to-government) support. Section 3 discusses the scale of multilateral and European-level aid. Section 4 summarizes data on aid allocated to Ukraine before the war broke out. Section 5 presents the main insights from our new database, in particular the country rankings. The last section concludes.

2. Bilateral Support for Ukraine - Data Construction, Definitions and Challenges

This section provides an overview of definitions, sources, and measurement of assistance included in our new database. First, we discuss the types of aid considered. We then describe the data collection process, the primary sources, and the value estimation procedure for in-kind aid like military equipment, medicines, or food aid.

Country sample: We focus on 31 Western countries. The largest group are the 27 EU member countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, and Sweden. In addition, we include the (remaining) member countries of the Group of 7 (G7), meaning that we also code support by Canada, Great Britain, Japan, and the United States. Moreover, we track and include assistance provided by the EU Commission in the core database.

What type of assistance do we track? Government-to-government support: This version of the database focuses on government commitments made to the government of Ukraine (meaning sovereign-to-sovereign transfers), including cross-border financial, humanitarian, and military aid flows. We only consider flows going into Ukraine, but not the support to neighboring countries such as Moldova, which welcomed record refugee numbers. Accordingly, we also do

³ The international organizations considered herein are the International Monetary Fund, the International Federation of Red Cross and Red Crescent Societies, the World Bank Group, the United Nations and the European Bank for Reconstruction and Development.

not track support to fellow NATO members.⁴ Since we focus on government-to-government commitments, this version of the database does *not* include other types of support, such as domestic spending for Ukrainian refugees that have fled to European countries or the United States.

We also do not count donations by private individuals, companies, churches, or non-governmental organizations (NGOs). Providing a systematic overview of these types of donations remains challenging as there exists no standardized reporting on these types of aid, and press reporting is unsystematic.⁵

We have also *not* (yet) systematically collected support from international organizations like the Red Cross or the United Nations, mainly because of the lack of systematic data and reporting by most of them. We plan to include estimates on these flows in one of the next updates of the database.

For now, we add a short overview on easily identifiable commitments by international organizations in Section 3. This includes information on aid provided by the EU and its foreign assistance vehicles, as well as commitments by international financial institutions like the International Monetary Fund (IMF), the World Bank, the European Bank for Reconstruction and Development (EBRD), and the European Investment Bank (EIB). In our results section, we only consider support by EU, including the EIB.

Defining humanitarian, financial, and military support: We distinguish between military, humanitarian, and financial assistance. Military support includes all types of weapons and military equipment alongside items explicitly donated to the Ukrainian army (such as bottled water, gasoline, or foodstuff). Humanitarian aid refers to assistance supporting the civilian population, mainly food, medicines, and other relief items.

Financial support includes grants and loans to the government of Ukraine.⁶ We also consider currency swap lines extended to the Ukrainian central bank, since these are standing credit lines allowing Ukraine to pay for imports and urgent war necessities in foreign currency (Poland extended a \$1 billion USD line). Financial support that is tied to military purposes such as Sweden’s grant to the Ukrainian Armed Forces (of kr 500 million or €48.3 million) is classified as military aid. The same is true for the United States’ “Foreign Military Financing Program” for Ukraine, which provides loans and grants for the purchase of weapons and defence equipment, as well as the European Union’s €1 billion European Peace Facility (EPF) which is

⁴ Whenever we were unable to disentangle the aid sent directly to Ukraine’s government from aid sent to neighboring countries, we assumed upper bounds and reported the total value of the aid for Ukraine. One example is the US commitment of \$647 million for an “Economic Support Fund” that allocates resources not only to Ukraine, but also to other countries affected by the Russia-Ukraine war (dataset ID: USH3). This package was reported in the [Ukraine Supplemental Appropriation Act 2022](#).

⁵ Some private donations are also channeled through international organizations. For example, UNHCR’s Ukraine emergency response received more than \$200 million from companies, foundations, and individuals (UNHCR 2022; reported on March 14). Furthermore, there are in-kind donations that are hard to evaluate. Private firm SpaceX reported to have sent “thousands” of Starlink satellite internet kits to Ukraine following the Russian invasion (Sheetz 2022), although these donations seem to have been financed by the US government (Lima 2022).

⁶ These include Italy’s grant of €110 million (approved on February 27); France’s loan of €300 million with a 1.04% interest rate and maturity of 15 years (committed in early March, approved on March 28) and Japan’s loan of \$100 million (announced on March 7), which is channelled as “parallel financing” by the World Bank.

set up to reimburse the cost of military weapons and equipment to EU member countries who deliver military material to Ukraine.

Commitments vs. disbursements: We generally report commitments instead of actual deliveries, as information on deliveries is typically scarce. We may thus overestimate the actual amount of aid delivered in some cases.

Sources: To create our new database, we follow the approach of existing trackers such as the “United Nations COVID-19 Vaccine Market Dashboard” and combine official government sources with information from international news media and existing overviews on aid to Ukraine. Specifically, we follow three steps consulting different types of sources:

- Our starting point was several helpful *cross-country overview lists on military and humanitarian aid to Ukraine*. Two such lists are assembled and regularly updated by the British House of Commons Library (Curtis and Mills 2022 and Brien and Loft 2022). We also draw on the Wikipedia page “List of foreign aid to Ukraine during the Russo-Ukrainian War”⁷, and a factsheet of EU aid by the European Civil Protection and Humanitarian Aid Operations⁸. Furthermore, there exists data collected by The Forum on Arms Trade⁹, Politico¹⁰, and Aljazeera¹¹. Neither of these lists is complete, and a systematic comparison revealed errors and inconsistencies. Moreover, these lists state individual aid announcements without systematically quantifying the *value* of assistance, making comparisons across donors challenging.
- The main sources for coding were *government press releases and government statements*, mainly published on websites of the central governments (prime ministers or governments) and by key ministries (foreign office, defense, economics, and finance). Besides searching through these websites, we also considered the Twitter accounts of governments, their departments, and ministers, which often contain detailed announcements.
- To supplement the government sources and gather additional details, we also conducted a *systematic media search* using Google News. For this purpose, we used the following keywords in various combinations: “[donor country name]”, “Ukraine”, “aid”, “military aid”, “humanitarian aid”, “solidarity”, “weapons”, “support”.

Coding procedure: We use official sources, when available, as the main source. At least two separate people coded each entry. In case of inconsistencies between coding entries or sources, we made an in-depth inquiry based on additional sources, which solved the issue in all but a few cases. For almost any transaction we can draw on more than one serious source to confirm the data entries. We evaluated and ranked the sources by their reliability, taking governmental press releases and government websites as the most reliable source, followed by governments’ statements on social media and news articles reported in renowned international media outlets.

Quantifying in-kind donations – how we measure the value of weapons or foodstuff: Our aim is to move beyond anecdotal evidence and instead quantify the value of support to Ukraine in millions of Euros. Whenever governments report the value of their donations in their national currency, we use these numbers as the baseline value. In many cases, however, governments

⁷ See https://en.wikipedia.org/wiki/List_of_foreign_aid_to_Ukraine_during_the_Russo-Ukrainian_War.

⁸ See https://ec.europa.eu/echo/where/europe/ukraine_en.

⁹ See <https://www.forumarmstrade.org/ukrainearms.html>.

¹⁰ See <https://www.politico.com/news/2022/03/22/ukraine-weapons-military-aid-00019104>.

¹¹ See <https://www.aljazeera.com/news/2022/2/28/which-countries-are-sending-military-aid-to-ukraine>.

do not report the value of aid, but only the items supplied like specific weapons or several “tons of foodstuff”.

Valuing these types of in-kind donations is challenging and requires some element of judgment. We plan to continuously improve our estimates and appreciate feedback on individual items to ukrainetracker@ifw-kiel.de.

To summarize, we value in-kind donations by drawing on government sources whenever possible but also resort to price information available from online marketplaces and stores when unavoidable. Moreover, as a general rule, we use upper bounds of prices to avoid underestimating the true scale of support. Furthermore, we use the same unit price for identical items across donors.

For military equipment and weapons, typical prices are often provided on Wikipedia. When possible, we use prices for the exact item (for example, when the exact weapon name or type is known). For protective or supportive military equipment like helmets, vests, or tents, we take averages of latest available retail prices.¹² For ammunition prices, we consult online stores and use single cartridge costs. We generally ignore bulk discounts, again choosing upper bound values. When the type of ammunition is not specified, we assume that they refer to the kind of weaponry delivered with the ammunition.

To estimate the value of everyday items with no fixed prices like “pair of shoes” or “bottled water”, we approximate a reasonable value using information from online stores. When possible, we draw on prices and unit costs listed by NGOs or private firms which have donated a specific type of item in this or past crises (for example, sleeping mats).

To estimate the value of medical supplies or “tons of medicines”, we use an average of prices listed by NGO sources.¹³ As for “tons of food” delivered, we consult the literature and government info on the value of wasted food, while accounting for luxury and perishable items which would not have been donated (Buzby et al. 2014). “Tons of necessities” are valued at the average price of medical and food deliveries.

Sensitivity checks: benchmarking our valuation of in-kind donations: To check the reliability of our quantification approach, we have made a number of sensitivity checks. Most importantly, we benchmark our valuation results for in-kind donations for those cases in which we know both the full list of donated items as well as the official value of the package. For those cases, we can use our coding approach and put a monetary value on the arms and other military equipment in the package and then benchmark our estimated total value against the official value given by the donor government itself. Below are three examples for which this type of benchmarking was possible. The comparison is overall reassuring.

- United States: On March 16, President Biden announced an additional security assistance package to Ukraine valued at \$800 million, including various anti-armor and infantry

¹² If the exact type or model is undisclosed, we draw on the donor’s military endowments. For example, if a country’s military largely relies on one type of machine gun, we assume that ammunition of that gun is sent.

¹³ This follows the valuation approach by Doctors Without Borders during the Bosnia war, see Annex 5 B: Value Estimation here: <https://www.aerzte-ohne-grenzen.de/sites/default/files/mediathek/entity/document/1998-01-bosnia-report-donation-practices.pdf>.

weapons, drones, and ammunition (The White House 2022).¹⁴ Following our assumptions, we estimate a total value of \$773.3 million¹⁵ for the package, which is close to the \$800 million reported by the US government.

- *Germany*: The German government has not shared systematic information on its weapon deliveries to Ukraine. However, on March 24, the magazine Der Spiegel published a detailed leaked list from the German Federal Ministry of Economic Affairs that values Germany's shipments of military equipment to Ukraine at a total of €37.3 million up to March 7 (Gebauer 2022). In the list, €31.3 million refer to "major and lethal weapons", while €5.8 million are "additional military equipment" (the remaining €200,000 are unspecified). The package includes 500 Stinger missiles and 1,000 Panzerfäuste 3 (lethal weapons), plus a number of less valuable items including 23,000 helmets, as well as protective vests, and night vision devices.¹⁶ Using our coding approach and price assumptions, we get to a combined value of €63 million for the Stingers and Panzerfäuste 3.¹⁷ This is almost twice the value of €31.3 million reported by Der Spiegel, quite likely because we use prices for new weapons, while the ministry uses second-hand prices. In the database we use the more reliable amount of €31.3 million.
- *Czech Republic*: According to Czech media reports, the Czech government provided Kč 750 million (€30.4 million) worth of military assistance to Ukraine between end February and mid-March (Fraňková 2022). Using our valuation approach, we get to a total value of military assistance of Kč 785 million (€31.85 million), which is almost identical to the sum reported in the press.¹⁸

Cases of "hidden support" and missing information: Since end-February, some governments announced not to share further details on their military support for Ukraine. In our database, that is true for five countries in particular, namely Finland, France, Germany, Italy, and Spain.

¹⁴ According to the New York Times, the included 100 Tactical Unmanned Aerial Systems are of the type AeroVironment Switchblade (Barnes and Ismay 2022). These kinds of drones, also known as suicide drones, are cheaper compared to other models and are evaluated at \$6000 per piece according to our source (Rationalinsurgent 2022). Moreover, we value the 20 million rounds of ammunition at \$5 per round according to our sources. This was done to account for rounds sent for grenade launchers and mortars.

¹⁵ Specifically, we assign the following values to the contents of the package: 800 Stinger anti-aircraft systems (our per-unit price assumption: \$119,000 per unit), 2000 Javelins (\$256,000), 1000 light anti-armor weapons (\$2,000), 6,000 AT-4 anti-armor systems (\$1,500), 100 Tactical Unmanned Aerial Systems (\$6,000), 100 grenade launchers (\$2,250), 5,000 rifles (\$700), 1,000 pistols (\$800), 400 machine guns (\$5,300), 400 shotguns (\$1,100), 20,000,000 rounds of small arms ammunitions, grenade launchers and mortar rounds (\$5 per round), 25,000 sets of body armor (\$500), 25,000 helmets (\$1,400).

¹⁶ Another detailed list, by Der Tagesspiegel of March 29 reported an additional dispatch of 8 million rounds of ammunitions, 100 MG3 machine guns and 64 vehicles of which 14 are armored (Krause 2022). In addition, the German government announced the supply of 2,700 Strela missiles on March 3, of which 2,000 have eventually been delivered, while 700 missiles were reportedly unsafe and unsuitable for use (Gebauer and von Hammerstein 2022).

¹⁷ Specifically, we assume a price of \$119,000 for each of the 500 Stinger anti-aircraft systems as well as \$10,000 for each of the 1000 Panzerfäuste 3.

¹⁸ Specifically, we get to a total value of Kč 224.7 million (€9.1 million) for the first two military shipments and an additional supply of weapons and equipment worth Kč 400 million (€16.2 million) approved on February 27. Adding Kč 17 million (€690,000) in weapons donated by private arm manufacturers, Kč 31.5 (€1.3 million) in additional military aid, Kč 24 million (€1 million) in additional material and Kč 53.26 million (€2.2 million) in equipment, Kč 30 million (€1.2 million) in fuel and petrol for the Ukrainian Armed Forces, Kč 4.5 million (€182,593) in fire engines, we arrive to a total of Kč 785 million (€31.85 million).

For Germany and Italy, the press reported many details, so that the picture seems rather complete overall.¹⁹ Indeed, despite a lack of official data, leading government politicians in Germany have repeatedly confirmed details on individual deliveries in interviews or Twitter statements over the past weeks (see above). In the other countries, however, information is harder to come by.

In France, Thierry Burkhard, chief of staff of the French army, explained that France will provide no details on the kind of weapons it intends to send to Ukraine to avoid provoking a military conflict with Russia (Dalton 2022). We only know of one specific military commitment, made in a press statement by the Elysé on February 26, for an undisclosed amount of defensive weapons and military equipment, including protective equipment and anti-tank systems, along with fuel. But no further details were given, in particular no details on the number or type of weapon delivered. For this reason, our database does not contain an estimate for the value of military aid by France. What we do know is that France extended a €300 million loan to Ukraine along with an estimated €102 million in humanitarian aid.

Spain's government initially shared information on military shipments, but stopped doing so. Specifically, on March 2, it announced to send 1,370 anti-tank grenade launchers as well as 700,000 rifles, plus light machine guns and ammunition. On March 11, the government then announced an additional shipment of weapons but Spanish Foreign Minister Jose Manuel Albares refused to specify any detail. No further details or shipments have become public since then. As a result, we can only quantify the first commitment, which we value at €3.3 million.

Finland is another country that stopped sharing information on military government aid. In late February, the government announced a detailed list of weapons and military equipment that we value at €9.2 million in total. Yet, on March 24, the Finnish President approved the delivery of additional defense material, but the government refused to provide further details. We can therefore only include the commitments of late February but not March 24.

3. Multilateral and European-Level Support

This version of the database focusses on direct government-to-government assistance. For completeness, however, this section provides short overview on EU-level support and commitments by multilateral organizations including the IMF and the World Bank.

3.1 Mechanisms of European Union Support

Our main dataset tracks *bilateral* foreign aid worth €13 billion of EU and G7 member countries to Ukraine in the first month of its Russian invasion. To adequately capture European support for Ukraine, however, we also account for aid provided by the European institutions and its

¹⁹ Total Italian military aid is valued at €150 million in our database. According to the newspaper La Repubblica, the Italian Minister of Defense Lorenzo Guerini stated on February 28 that the total value of weapons and equipment deployed to Ukraine lies between €100 and €150 million (Mattera and Vitale 2022). Apart from this aggregate information, we know little regarding the total number of items and equipment of Italian military assistance to Ukraine. According to Il Fatto Quotidiano, Italy sent dozens of Stinger launchers to Ukraine, together with millions of rounds of ammunition caliber 12.7, thousands of mortar bombs, browning machine guns, thousands of helmets, Milan launchers and thousands of food rations (Pacelli 2022). As Termometro Politico reports, equipment material accounts for €50 million out of the €150 million in total military aid (Sano 2022).

various foreign assistance mechanism, including those of the European Commission and the European Council.

- The **European Peace Facility (EPF)**: In late February 2022, the Council of the European Union approved the creation of a new fund to finance arms and equipment for the Ukrainian army, initially worth €500 million and then doubled to €1 billion on March 23 (European Council 2022). The funds will not flow directly to the Ukrainian government, but will instead be used over a longer time period to reimburse EU member countries for the expenses of sending military aid to Ukraine. The exact workings of this fund remain vague and little official details have been published. A recent analysis by Fotidiadis and Schmidt (2022) provides the most detailed analysis, suggesting that there is little agreement on details between EU governments, no systematic data collection, and that “decisions on reimbursement are made unanimously by member states” on a case-by-case basis. In line with this, we found little evidence of how and when this fund has been used in practice, with only two countries officially drawing on it for the minor amount of €10 million.²⁰ Since we include upper bounds here and focus on commitments rather than disbursements, we nevertheless count the €1 billion in full in our analysis below. Specifically, we include the total size of the European Peace Facility (EPF) as part of *EU (Commission and Council)* commitments.
- The European Union’s **Macro-Financial Assistance (MFA)** program is a vehicle to support non-EU countries that face a balance of payment crisis via loans and grants. On February 1, before the start of the war, the European Commission agreed to a new emergency MFA program for Ukraine of up to €1.2 billion in concessional loans (the sixth MFA operation in Ukraine since 2014). In response to the war, payouts were fast-tracked, with the first loan instalment of €600 million disbursed in two tranches on March 11 and 18 (European Commission 2022a). The remaining €600 million of low-interest rate loans will be disbursed “later in the year”. Since this commitment was made prior to February 24, we do not include it in our main dataset. However, we report the MFA position in the “Non-Bilateral Aid” sheet in our database.
- The **EU Civil Protection Mechanism** is an instrument aimed to improve the prevention, preparedness, and response to disasters. For Ukraine, our data show that about €115 million have been committed through this vehicle since the start of the war. Since this is a coordinating mechanism rather than a fund of its own, we attribute the aid through this instrument to the country providing aid and not to the European Commission.
- The **European Investment Bank (EIB)** is a separate entity from the European Commission, with its own funding and decision-making process. In March 2022, the EIB announced an emergency solidarity loan for Ukraine of €2 billion plus a small humanitarian package worth €2.5 million. The €2 billion commitment includes the immediate provision of €668 million as liquidity assistance to the Ukrainian authorities, plus €1.3 billion EUR of commitments made for infrastructure projects and reconstruction to be paid out “as soon as conditions allow”. Part of the emergency funding seems to have been committed already before the war (“originally granted to support SMEs and the agricultural sector in Ukraine”), but details are hard to find (European Union 2022). We do not include EIB commitments

²⁰ Portugal and Latvia seem to have received €9 million and €1.2 million, respectively, for their military donations to Ukraine, having been reimbursed through the Facility (database identifiers PTM1 and LVM1). To avoid double counting, we plan to drop PTM1 and LVM1 in the next release of the database.

in our main dataset because the latter focuses only on the EU member countries and the European Commission. However, we do include these commitments in the “Non-Bilateral Aid” sheet in our dataset as well as in Figure 5 below, which assigns EU support to the contributing member countries.

3.2 Support by International Organizations

This section offers a brief overview of support to Ukraine by major international organizations. Support by other multilaterals such as the United Nations or the Red Cross will be added in future versions (details on aid amounts by these organizations are not easy to find or not published at all).

- **IMF programs:** On March 9, the International Monetary Fund announced and disbursed an emergency assistance loan of \$1.4 billion to Ukraine under the umbrella of its Rapid Financing Instrument. The purpose is “to help meeting urgent financing needs including to mitigate the economic impact of the war” (IMF 2022).
- The **World Bank** mobilized a \$723 million emergency package for Ukraine in early March (World Bank 2022a). The package consists of a \$350 concessional loan by the World Bank, grant financing of \$134 million (\$100 million by Great Britain, the rest from Denmark, Latvia, Lithuania, and Iceland), as well as loan guarantees by the Netherlands (\$89 million) and Sweden (\$50 million) and \$100 million of “parallel financing” in form of a loan by Japan. Since our core database focuses on direct government-to-government assistance, we do not consider these positions in our bilateral estimates of assistance to Ukraine. However, we do include Japan’s linked *parallel* financing of humanitarian aid worth \$100 million in its bilateral assistance provided to Ukraine (announced on March 7) (World Bank 2022b). Future versions of the database will further disentangle bilateral and multilateral commitments.
- On March 9, the **European Bank for Reconstruction and Development (EBRD)** announced a support package for Ukraine and neighboring countries totaling \$2 billion. The package includes deferred loans, liquidity support, and trade finance (Porter 2022), but there are few further details available.

4. Aid to Ukraine prior to February 24, 2022

This section offers a brief overview of international assistance to Ukraine prior to Russia’s invasion on February 24, 2022. We start by summarizing the aggregate support between 2014 and 2021 and then highlight individual commitments made in January and February 2022.

4.1 Support to Ukraine between 2014 and 2021

Since independence in 1991, Ukraine has been a regular recipient of bilateral and multilateral support. Russia’s occupation of Crimea in 2014 and its subsequent invasion of the Donbass motivated a new wave of commitments by Western governments, with the United States, the IMF, and EU institutions standing out (Mills 2022).

The EU institutions have been by far the largest financial supporters of Ukraine in the years 2014-2021. EU aid took the form of grants and loans for financial and humanitarian support, but little to no military aid. The EU’s scope of support was increased drastically after March

2014, following Russia's occupation of Crimea. Specifically, the EU announced a major new financial aid package of up to €11 billion to Ukraine, which was partly motivated to counter Russia's \$15 billion financial aid offer to President Yanukovich in December of 2013. That package contained €1.6 billion in MFA loans, €1.4 billion of grants, up to €8 billion in loans from the EBRD and the EIB, and potentially another €3.5 billion through the "Neighborhood Investment Facility" (European Commission 2022b). Since then, total aid was further increased to a volume of €17 billion, mostly in the form of loans and including several more MFA programs (European Parliament 2022; European Commission 2022c).

With a view to international financial institutions, the IMF approved several major support packages, starting with a March 2014 announcement of up to \$18 billion in new financial aid (Giucci and Zachmann 2014) and a renewed IMF program in 2015 (the disbursements were ultimately much smaller, however). Also the World Bank and the EBRD offered major packages.

Turning to individual countries, the US has been by far the largest bilateral supporter, including large amounts of military aid (see King 2019 for country comparison until 2019). According to the United States' Congressional Research Service (2021), the US government has provided more than \$2.5 billion in security assistance to Ukraine between 2014 and 2021, mainly through the Ukraine Security Assistance Initiative and Foreign Military Financing. In addition, the US Department of State and USAID provided more than \$3 billion in bilateral, non-military aid since 2014.

The next most important bilateral supporters are Germany followed by Canada. Since 2014, Germany provided more than €1.8 billion in financial support to Ukraine. This support included €750 million in development assistance (mostly GIZ, KfW and PTB projects), €150 million in humanitarian aid ("for clearance and the disposal of explosive remnants of war") and a loan guarantee facility of €500 million (Federal Foreign Office 2022). Moreover, Canada has provided more than €650 million (890 million Canadian dollars) in aid to Ukraine since January 2014 (Government of Canada 2022).

4.2 Support in January and February 2022

Our database tracks commitments following Russia's invasion on February 24, but some governments and institutions had already started to up their financial and military support as Russia was amassing troops on Ukraine's border. Here we list a few major commitments of January and February 2022.

The Canadian government, in particular, made large commitments in the weeks prior to February 24, with total aid in those weeks exceeding that in the weeks after. Specifically, on January 21 it offered to provide a loan of up to C\$120 million (€87 million equivalent) to the government of Ukraine, followed by another loan commitment of up to C\$500 million (€362 million) on February 14 (Department of Finance Canada 2022). Furthermore, on January 26, Canada announced C\$340 million (€246 million) for immediate support to Ukraine and for military training and capacity building (under "Operation UNIFIER") plus C\$50 million (€36 million) for development and humanitarian assistance (National Defence 2022a). Finally, Canada announced to donate C\$7 million (€5 million) worth of lethal weapons and assorted support items to the Armed Forces of Ukraine on February 14 (National Defence 2022b). If we were to count these commitments, Canada would rank 3rd among the countries offering the most bilateral support to Ukraine (instead of 9th).

On January 17, the US government announced a new sovereign loan guarantee of up to \$1 billion to stabilize Ukraine's economy (Biden 2022).

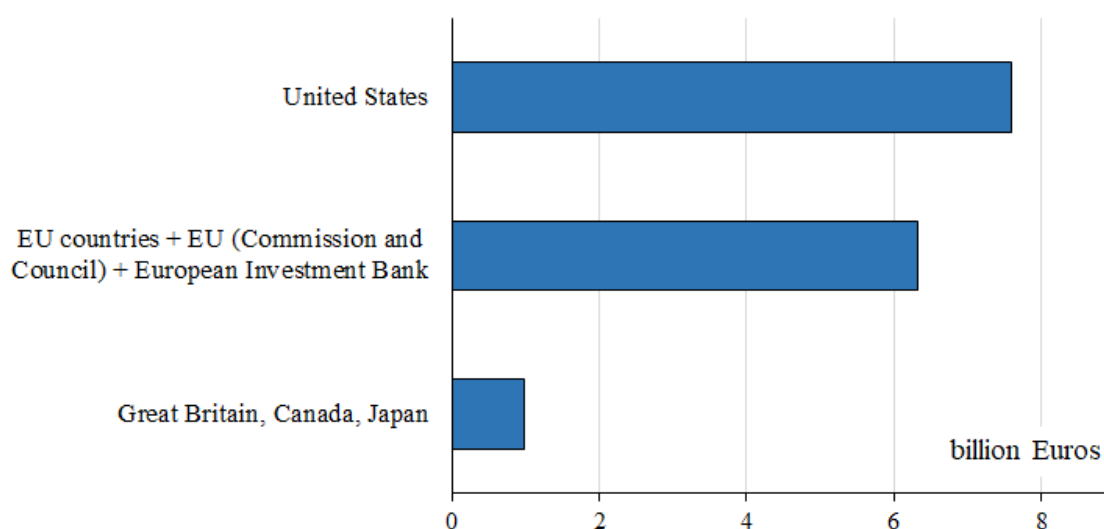
On the same day, the British government announced its intention to supply military equipment and weapon systems to the Ukrainian Armed Forces, including 2,000 new light anti-tank weapons (Allison 2022). Several other NATO members, including the Netherlands and Latvia, had also announced their intention to send weapons and military equipment to Ukraine before the invasion took place (Curtis and Mills 2022). For example, the Dutch government on February 18 committed military equipment including 3,000 combat helmets, 2,000 ballistic vests, 30 metal detectors, two mine detection robots, two ground surveillance radar systems and five weapon locating radar systems, 100 sniper rifles as well as 30,000 rounds of ammunition (Government of the Netherlands 2022).

5. Country Rankings

Taken together, our main database tracks €13 billion of *bilateral* humanitarian, military, and financial support to Ukraine by the EU and G7 governments (February 24 to March 27, 2022). Additional multilateral and EU support is listed separately. In this section, we summarize the main results from the database, focusing on bilateral commitments across countries.

In Figure 1, we compare the size of total commitments to Ukraine by the US, the EU countries and the remaining three countries (in billion Euros). The total EU commitments of €6.3 billion include bilateral commitments by all 27 EU member country governments countries (a total of €2.9 billion), plus commitments of €1.4 billion from the EU Commission and Council (including the €1 billion European Peace Facility) and €2 billion by the EIB. Canada, Great Britain, and Japan committed a total of €1 billion.

Figure 1. Government support to Ukraine - overview of Western aid

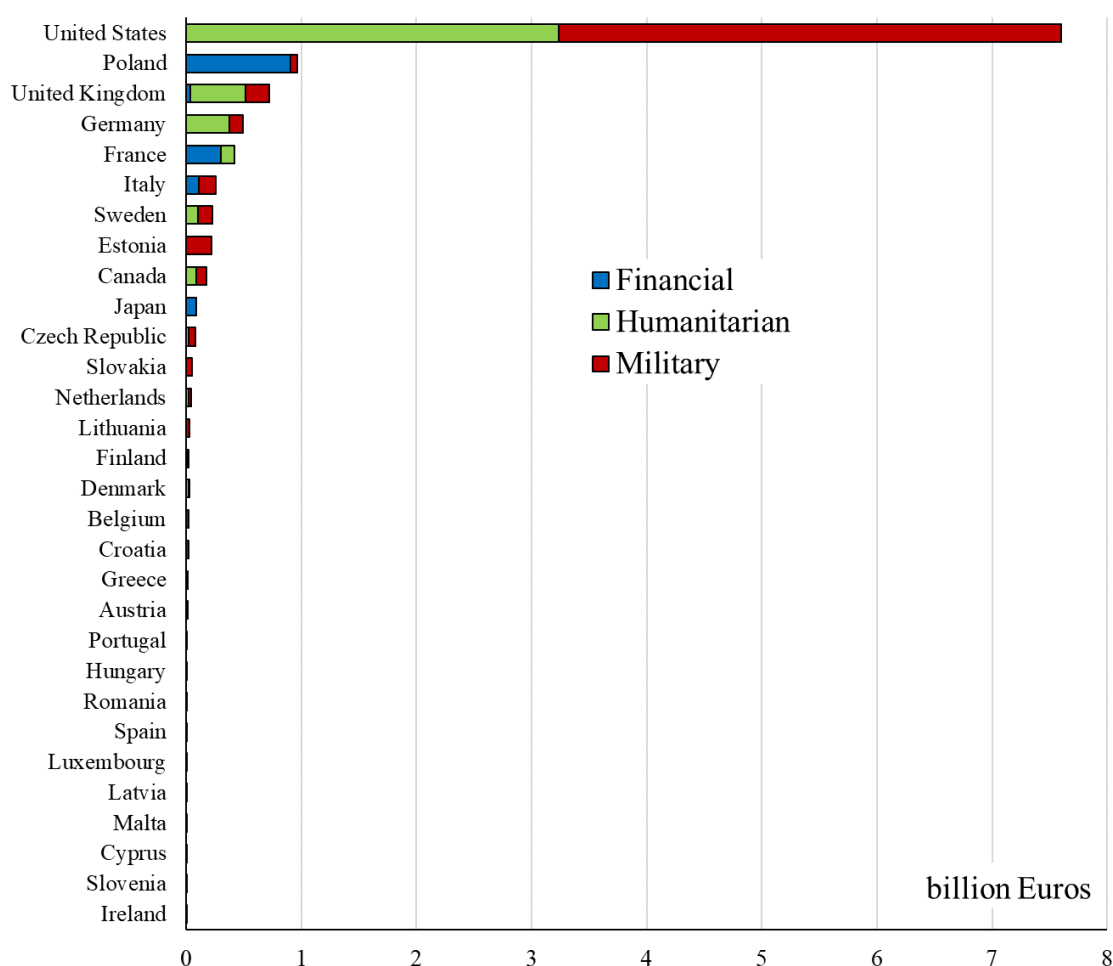


Note: This figure summarizes the sum of new support commitments to Ukraine in billion Euros in the first month of the Russia-Ukraine war (February 24 to March 27, 2022). The EU commitments include bilateral commitments by all 27 EU member country governments countries (a total of €2.9 billion), plus commitments of €1.4 billion from the EU Commission and Council (including the €1 billion European Peace Facility) and €2 billion by the EIB.

A main insight is that the United States alone (€7.6 billion) provides more assistance to Ukraine than all other 30 Western donors plus the EU institutions combined (€7.3 billion). It is particularly striking that the EU provides less aid than the US, despite the fact that this is a European war and that the EU has a similar financial capacity than the US (the EU's total GDP is only slightly lower than that of the US).

In Figure 2, we rank countries by their total commitments since February 24 and differentiating by type of aid. In line with the above, the US clearly tops the list and accounts for 59% of total bilateral aid. Poland is the largest European donor (€963 million) owing in large part to its financial commitment in form of the central bank currency swap line. Next come the United Kingdom (€721 million), Germany (€492 million), France (€416 million), and Italy (€260 million).

Figure 2. Country ranking in billion Euros: total commitments to Ukraine and type of aid

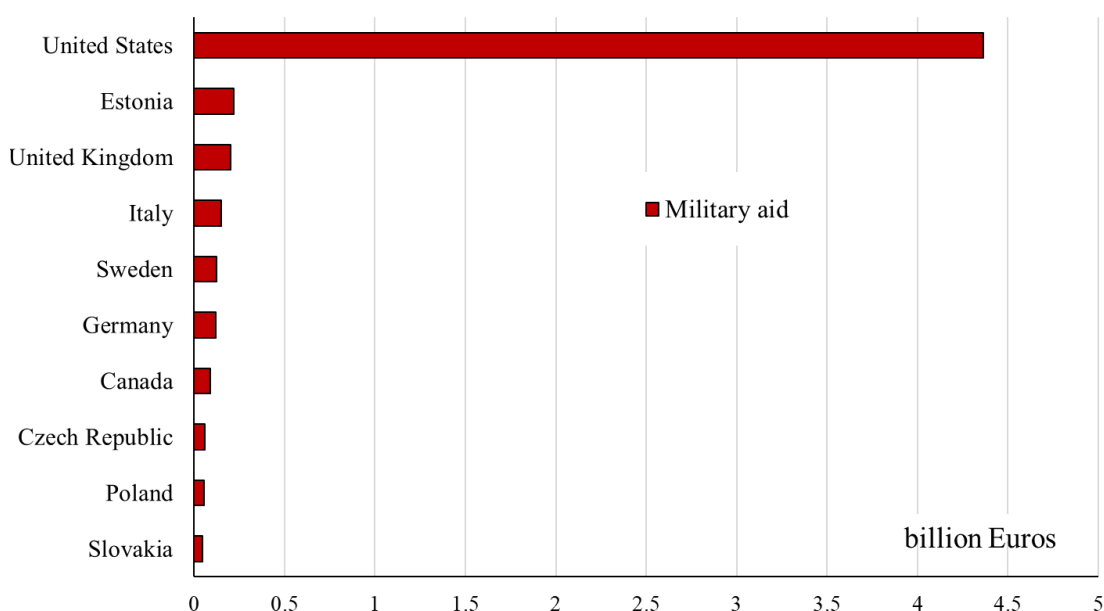


Note: This figure shows total bilateral aid commitments to Ukraine across donor governments in billion Euros and considering the first month of the Russia-Ukraine war (February 24 to March 27, 2022). Each bar besides illustrates the type of assistance, meaning financial assistance (loans, grants, and swap lines), humanitarian aid (assistance directed to the civilian population including food and medical items), and military assistance (arms, equipment, and utilities provided to the Ukrainian military). Military aid includes direct financial assistance that is tied to military purposes. Please refer to the main text and our dataset for details on data collection and sources.

Turning to the type of aid, we find that the ranking of military aid differs from the overall ranking, as shown in Figure 3. The US again tops the list (€4.366 billion), but is then followed by Estonia (€220 million), the United Kingdom (€204 million), Italy (€150 million), Sweden (€126 million), and Germany (€119 million). With a view to Section 2, these numbers should however be taken with care, since some EU countries announced not to report their military aid to Ukraine, so that we omit some commitments.

It is striking that the US committed almost four times as much military aid as all other 30 Western countries combined (€4.366 billion US vs. €1.216 billion for all others, not accounting for the €1 billion European Peace Facility, which seems not to have been used extensively, see above). It is equally striking that the small country of Estonia offered more military aid to Ukraine than all of the large EU economies, according to our data.

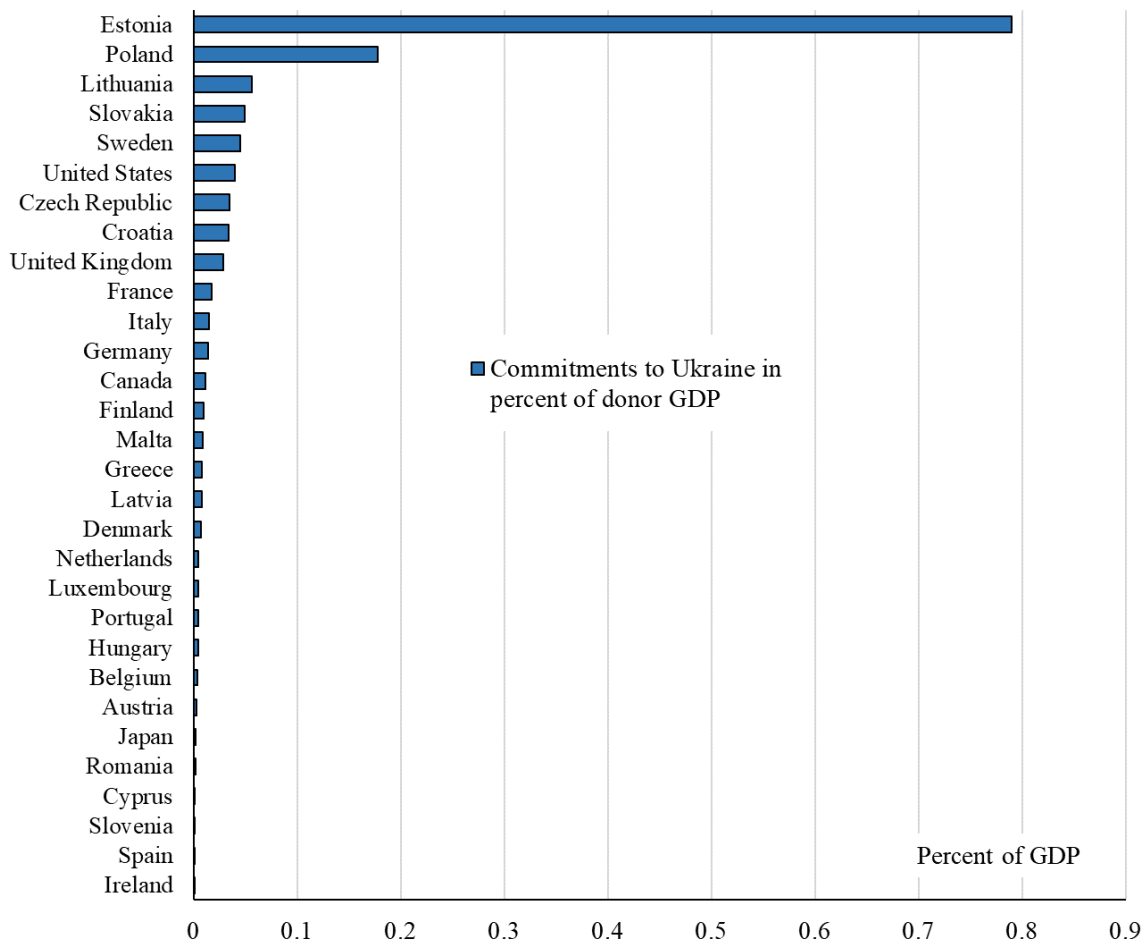
Figure 3. Top 10 military aid providers to Ukraine (bilateral commitments to Ukraine)



Note: This figure shows a ranking of the top ten Western governments that have offered military aid to Ukraine between February 24 and March 27, 2022. We exclude humanitarian and financial aid and do not consider EU (Commission and Council) contributions.

As a next step, we scale bilateral aid commitments by each donor country's GDP (in percent). Figure 4 shows that Eastern European countries stand out as particularly generous when considering the size of their economy, with Estonia, Poland, Lithuania and Slovakia being the top four donors. The United States (being the largest donor in absolute terms) comes in sixth, providing assistance worth around 0.04 percent of its GDP.

Figure 4. Country ranking in percent of donor GDP (bilateral commitments to Ukraine)



Note: This figure ranks countries by the scale of bilateral aid as percentage share of each donor's GDP. We consider total commitments to Ukraine February 24 to March 27, 2022. The data on GDP (current US\$) is for 2020 and taken from the World Bank. See the main text for details on data collection and sources.

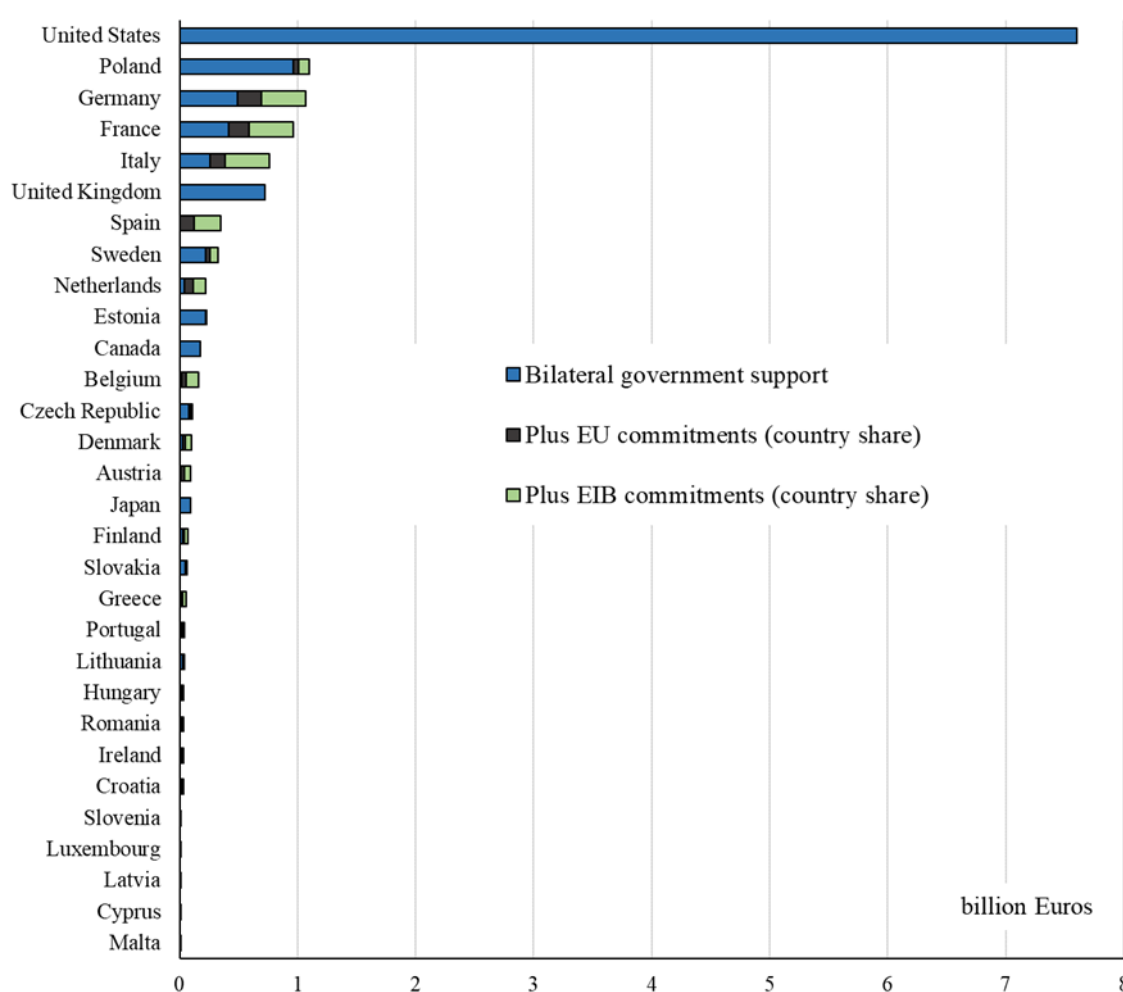
In a last step, we show Figure 5, which takes into account assistance provided through the EU's institutions and financing vehicles since February 24 (in billion Euros).²¹ The blue bar segments indicate bilateral aid (see Figure 2). Next come each country's share in commitments by the European Commission and European Council, in particular to the European Peace Facility (black segments, with a combined value of €1.4 billion). Third, we add each EU member's share in commitments of the EIB (€2 billion). More specifically, we assign EU-level commitments as follows. EU commitments (European Peace Facility plus humanitarian aid) are allotted based on each member country's relative contribution to the EU budget. Similarly, we assign EIB commitments using each country weight in the EIB's capital subscription shares. Commitments from the EU's MFA program (€1.2 billion) are not included, since it was agreed

²¹ We map commitments by the EU (European Commission and European Peace Program) into (additional) bilateral commitments in line with each donor's contribution to the EU's budget in 2020 (Clark 2022). Commitments by the European Investment Bank (EIB) equivalently translate into bilateral assistance following each EU member's relative capital subscription in 2012 (European Union 2012; Protocol (No 5), Article 4). The amount of EIB subscribed capital is based on the economic power of a member country when joining the EU.

on prior to February 24, similar to the large Canadian commitments in January and February (see Section 3.1 and 4.2).

As can be seen, the United States clearly remains the largest donor in Figure 5 (€7.6 billion) and Poland remains in second place (€1.10 billion). However, Germany (€1.07 billion) and France (€0.96 billion) now surpass the United Kingdom and rank in the top four, consistent with their large contributions to the EU’s budget and its institutions. Once we include EU aid and calculate total aid to donor GDP (as in Figure 4), the ranking position of Germany and France is 14th and 9th, respectively.

Figure 5. Total aid to Ukraine, including country shares of EU and EIB commitment



Note: This figure shows a ranking of bilateral commitments after accounting for EU-level aid and financing vehicles. We assign EU-level commitments as follows: EU commitments (European Peace Facility, humanitarian aid) are allotted based on each member country’s relative contribution to the EU budget. Similarly, we assign EIB commitments using each country weight in the EIB’s capital subscription shares. See the main text for details on data collection and sources.

6. Concluding Remarks

This paper introduces the “Ukraine Support Tracker”, which provides a comprehensive picture of government-to-government assistance of Western donors to Ukraine in the first month of the Russia-Ukraine war. Our dataset tracks more than €13 billion of financial, humanitarian, and military aid committed to Ukraine since February 24, 2022. In the coming weeks, we plan to continuously improve and expand the database and working paper. For this purpose, we very much welcome comments and suggestions to ukrainetracker@ifw-kiel.de.

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Appendix I: Main sources by country

This section provides a list of particularly relevant sources by country. Whenever possible, we rank official (government) sources higher than media reports and other types of sources.

- Austria:
 - o Thelocal.at
<https://www.thelocal.at/20220228/austria-to-send-protective-equipment-and-fuel-to-ukraine/>
- Belgium:
 - o Press release by the Ministry of Foreign Affairs
https://diplomatie.belgium.be/en/newsroom/news/2022/belgium_sends_emergency_shepherd_material_ukraine_b_fast
 - o Tweets by Alexander De Croo
<https://twitter.com/alexanderdecroo/status/1497542000228417537>
<https://twitter.com/alexanderdecroo/status/1497914776063594502>
- Bulgaria:
 - o Sofiaglobe.com
<https://sofiaglobe.com/2022/02/27/bulgaria-to-provide-humanitarian-military-logistical-aid-to-ukraine/?msclkid=2fb3d8c7b05511ec86aca56bb6424b21>
- Canada:
 - o Press release on the governmental website
<https://www.canada.ca/en/global-affairs/news/2022/03/canada-announces-100-million-humanitarian-assistance-to-ukraine.html>
<https://www.canada.ca/en/departement-national-defence/news/2022/03/defence-minister-anand-announces-additional-military-support-to-ukraine.html?msclkid=50865665ab9011ecbb2d77d3ecd6e3a6>
<https://www.canada.ca/en/global-affairs/news/2022/02/canada-sending-additional-25m-military-aid-to-support-ukraine.html>
 - o Ctvnews.com
<https://www.ctvnews.ca/politics/ukraine-can-t-negotiate-with-gun-to-head-says-joly-as-trudeau-presses-allies-1.5811832>
- Croatia:
 - o Press release on the governmental website
<https://vlada.gov.hr/news/croatia-sending-emergency-aid-to-ukraine/33960>
<https://vlada.gov.hr/news/croatia-had-sided-with-freedom-and-democracy-and-with-the-ukrainian-people-which-is-the-only-right-way/34979>
- Cyprus:
 - o Press release by the Ministry of Foreign Affairs
<https://mfa.gov.cy/press-releases/2022/03/09/cyprus-humanitarian-aid-to-ukraine/>
- Czech Republic:
 - o Czdefence.com
<https://www.czdefence.com/article/czech-republic-donates-artillery-ammunition-worth-czk-366-million-to-ukraine>
 - o CNN.com
https://edition.cnn.com/europe/live-news/ukraine-russia-putin-news-03-13-22/h_025dcb1758c374a11f208c39d687f1b0
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