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Cyprus and the EU sanctions on Russia: macroeconomic impacts and policy recipes for a sustained recovery

Policy Brief

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Policy brief: Cyprus and the EU sanctions on Russia: macroeconomic impacts and policy recipes for a sustained recovery.[1]

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- **Key objectives**: We quantify the short to medium run impacts of EU sanctions against Russia after the invasion of 2022, for the economy of Cyprus. In turn, we examine the impact of European stimulus packages in the aftermath of the war such as the Recovery and Resilience Plan (RRP).
- **Key findings**: EU sanctions against Russia come with significant negative impacts for the economy of Cyprus which is attributed to the strong interconnectedness between the economies of Cyprus and Russia prior to the imposition of sanctions by the EU. These findings call for a new growth model for the economy of Cyprus and in particular reorientation of services exports to alternative destinations. Fiscal transfers such as the RRP can alleviate the impact, contribute in the burden-sharing of sanctions and at the same time enhance long term growth through structural reforms.

1 Motivation and policy context

The current state of affairs. The invasion of Ukraine by Russia in February 2022 stirred up uncertainty and threw new challenges in the global economy. This came at a time when economies were just beginning to bounce back from the Covid-19 pandemic, grappling with inflation, disruptions in supply chains, and mobility restrictions. In response to Russia's aggression, the EU rolled out economic sanctions aimed at weakening Russia's economic base and limiting its access to crucial technologies and markets. Starting from February 2022 the EU has imposed a set of restrictive measures covering a wide range of economic activities.[2] These include: Oil import/transport restrictions, financial and business services measures, prohibition of export/import various goods.[3] Indeed some of these goods and services categories are highly relevant to the economic ties between Cyprus and Russia and operate through various economic channels which we assess using our economic model tailored to Cyprus. As a member of the EU, Cyprus had to fall in line with the decisions made by the European Commission. At the same time, the EU is faced with growing skepticism about sanctions' effectiveness and 'sanctions fatigue' in the sense that the burden of implementation is not equally shared among member countries. Chowdhry *et al.* (2024) report that there exists a critical geographical and sociocultural dimension in the distribution of the sanctions' burden measured in terms of welfare gain/losses. This is particularly relevant for countries sharing geographic proximity and historical ties with Russia, as well as hosting significant Russian speaking populations who face higher costs when implementing sanctions.

Cyprus' economic dependence on Russia: What the data say? However, Cyprus had its own unique situation compared to its EU counterparts, having cultivated strong financial ties with Russia since the early 2000s. While most EU countries were hit by the loss of Russian energy imports, Cyprus, although not heavily reliant on Russian gas such as Germany or neighboring states like Poland and the Baltic states. Furthermore, despite reduced financial links since the financial crisis of the 2010s, Cyprus

[1] We are grateful to the Hellenic Observatory of the London School of Economics for financial support of the project and specifically the A.G. Leventis Foundation through the A.G. Leventis Research Innovation Programme on Cyprus.

[2] https://finance.ec.europa.eu/eu-and-world/sanctions-restrictive-measures/sanctions-adopted-following-russias-military-aggression-against-ukraine_en

[3] The list is exhaustive including goods such luxury, minerals, coal, gold, goods contributing to the enhancement of Russian industrial capacities, quantum computing, advanced semiconductors, sensitive machinery, transportation and chemicals, cement, rubber products, wood, spirits, liquor, high-end seafood

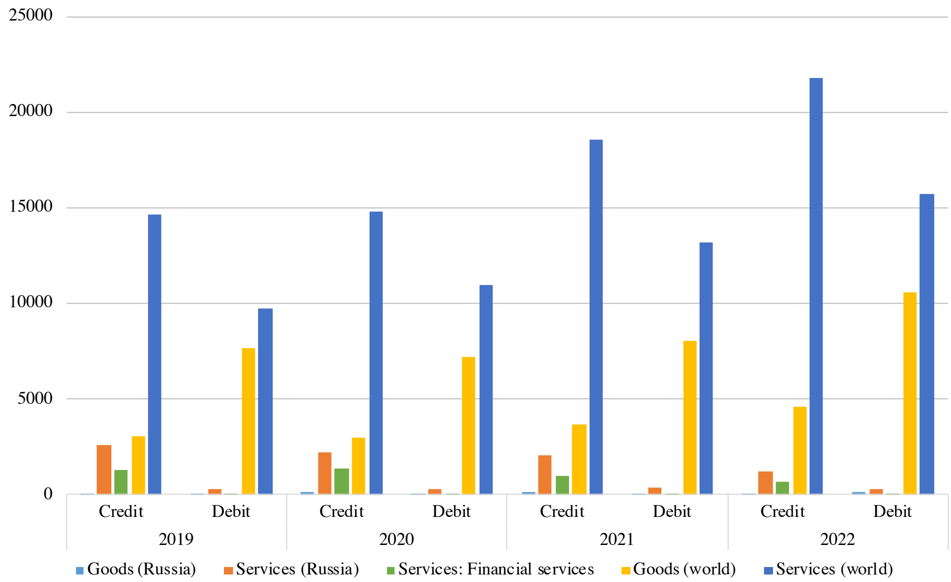
maintained strong trade ties with Russia, particularly in sectors like tourism and professional services as illustrated by its balance of payments account with Russia vis-a-vis the Rest of the World (see Figure 1). Additionally Russian Federation ranks first in terms of Cyprus's inward and outward Foreign Direct Investment (FDI). Cyprus's direct investment ties with Russia comprise of assets and liabilities (i.e. FDI stock) equivalent to approximately 450% of GDP in 2022, stemming primarily from historical practices of channeling capital to capitalize on Cyprus's favorable tax treatment. Similarly with the trade activities, FDI stocks and transactions of Russia with Cyprus accounted for the one fourth of total FDI activity (see Figure 2) Cyprus also found itself facing both direct and indirect economic shocks from the war, affecting its balance of payments and international economic connections. The rise in utility and transportation costs stemming from imported energy prices threatened to unsettle inflation expectations and consumer confidence (see Figure 3).

European stimulus package in the aftermath of the war Since the adoption of the Regulation on the Recovery and Resilience Facility (RRF) the geopolitical context changed considerably. The Russian-Urkraine war has created huge challenges for the EU, mostly with respect to energy capacity and trade, thereby aggravating the economic and social consequences of the Covid-19 crisis which was the main reason for the establishment of the facility. In turn, RRF has been complemented by other instruments (such as the RePowerEU), to improve its ability to effectively address the objectives of contributing to energy security, diversifying the Union's energy supply, improving energy efficiency, increasing energy storage capacities, and ultimately reducing dependence on fossil fuels by 2030.
Nevertheless, the overarching strategic goal of the RRF is "to strengthen the economy's resilience and the country's potential for economically, socially and environmentally sustainable long-term growth and welfare".[4] The Cypriot Recovery and Resiliency Plan (henceforth RRP) has been developed around five policy axes, namely (1) Public health, civil protection and lessons learned from the pandemic, (2) Accelerated transition to a green economy, (3) Strengthening the resilience and competitiveness of the economy, (4) Towards a digital era and (5) Labour market, social protection, education and human capital. Each policy axis consists of a mix of investments, structural and fiscal reforms, which in principle, should not only address the strategic aims outlined above, but should also be aligned or complement the strategic objectives of the European Semester and UN Sustainable Development Goals. The Cypriot economy can be highly benefited by leveraging the resources from the newly established European Recovery and Resilience Fund. In particular, Cyprus could benefit up to a net amount of around 1.2 billion euros mainly in grants and loans. In particular, the vast majority of the funds, 85% of the total amount, is planned to take the form of grants while the rest 15% will be loans. This amount translates to a total of 4.8% of the Cypriot GDP in 2019, and should be used by the end of 2026.

Aim In this context, the aim of this study has been twofold. First, to assess the macroeconomic impact of the ongoing war in Ukraine through the channel of EU sanctions against Russia (see (Mavrigiannakis and Sakkas, 2024)). In particular sanctions affect the sanctioning economy through export of services (mainly tourism and financial services), prices of imported goods and foreign direct investment. In turn, given the current situation, we assess policy recipes for a sustained economic recovery, with a focus on a set of investment policies along with structural and tax reforms in the context of the Next Generation EU-Recovery (NGEU) and the Recovery and Resilience Plan. In doing so, we develop a fully-fledged three-sector dynamic general equilibrium model with tradable, non-tradable and a rich public sector that embeds in a natural way specific stylized facts of the economy of Cyprus. Thus, this project contributes to the current debate in policy and academic circles with regard to the economic impact of economic sanctions on the sanctioning economies and the impact assessment of post Covid policy interventions.

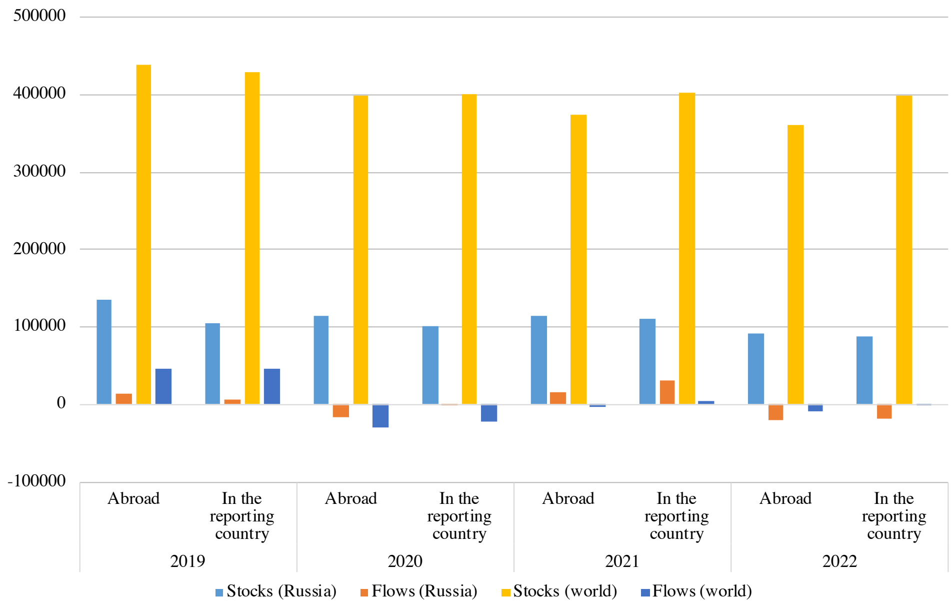
[4]The detailed National Recovery and Resilience Plan (NRRP) as submitted to the European Commission in May 2021 can be found here: http://www.dgepcd.gov.cy/dgepcd/dgepcd.nsf/rrplan_en/rrplan_en?OpenDocument

Figure 1: Balance of payments with Russia, (2019-2022), mln of euro



Source: Central Bank of Cyprus

Figure 2: Foreign Direct Investments, Stocks and Transaction, (2019-2022), mln of euro

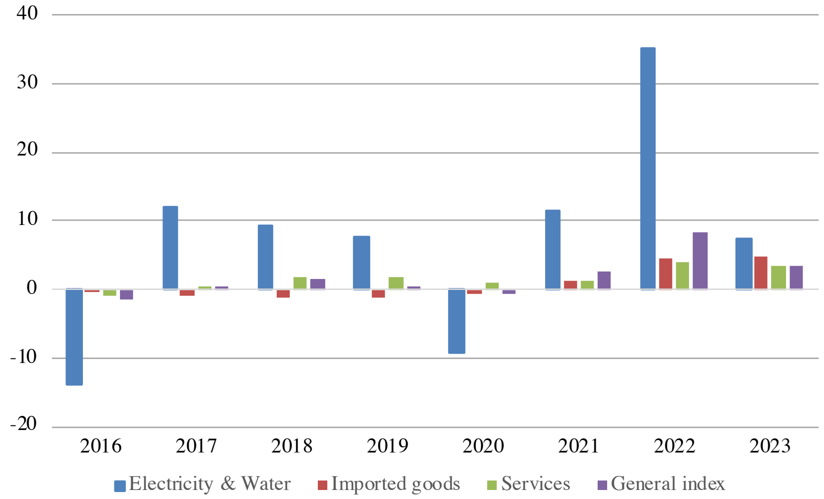


Note: Inward direct investment is investment by a non- resident direct investor in a direct investment enterprise resident in the host economy; the direction of the influence by the direct investor is "inward" for the reporting economy. Also referred to as direct investment in the reporting economy.
Source: Central Bank of Cyprus

2 Main findings

Predictions about the macroeconomic impact of sanctions. Our modeling enables us to view economic sanctions as three distinct types of shocks based on Cyprus' long standing economic linkages with Russia. These include: (i) an inflation-cost push shock affecting prices of imported goods, primarily driven by increases in oil and energy prices, (ii) a temporary decline in the export demand for goods and services to Russia, and (iii) a temporary decrease in net inward foreign direct investment from Russia. Imported goods utilized in the production process constitute a significant portion of total imports in Cyprus. Consequently, as import prices rise, leading to increased input costs, firms are likely to transfer some of these costs to output prices. Simultaneously, the reduction in exports of goods and services to Russia and the decline in inward FDI from Russia have a notable negative impact on aggregate demand. Collectively,

Figure 3: Price indexes evolution (y-o-y, %), 2016-2023



Source: Central Bank of Cyprus

our model indicates an average overall reduction in aggregate output ranging from -1.3% to -3.4% in the short term depending on the level financial tightening in the economy. The most substantial impact stems from the decrease in demand for services exports to Russia. Among the three scenarios examined, a reduction in inward FDI yields more enduring effects, persisting over multiple periods, albeit of a milder nature. Additionally, our quantitative analysis showed that countries, such as Cyprus, who were already in a critical juncture regarding their external position, face the risk of stronger negative impacts of the ongoing EU sanctions. In our model when we consider additional financial frictions our results become even worse - the negative impact on output more than doubles. This clearly indicates that adverse exogenous demand and inflationary shocks can make financial conditions even more tight. This is further enhanced by the already high private indebtedness of the Cypriot economy pointing to the necessity of addressing issues like the non performing loans and the persistent high current account deficits.

Predictions about the impact of RRP grants and reforms. In our simulation experiments, we assume that from the total amount of grants and loans received, 76% is used for government investments, contributing to the accumulation of public capital, and the remaining 24% for current government expenditures that span across a 6 year period (until 2026) according to NGEU and RRF regulations. Our numerical results show that RRP investments can contribute to a maximum increase of up to 1.4% of GDP by 2026 fading away gradually. Further, all demand components, including private consumption, investment and net exports are expected to increase. We also report that RRP produces an output multiplier of about 0.7 in the short run (by 2026) while the long run discounted fiscal multiplier is 1.6.

Regarding the impact of RRP reforms, which we model as a mix of productivity, product market and labour market reforms. In doing so we quantify (a subset) of reforms by mapping them to structural indicators (e.g the OECD's Product Market Regulation Index) for which the empirical literature offers reliable guidance regarding the sensitivity of key economic variables with respect to change in these indicators (see e.g the methodology in Malliaropulos *et al.*, 2021, Thum-Thysen *et al.*, 2015). Our experiments indicate that their impact could reach a 3.5% increase in GDP in the short-run (i.e. by 2027 shortly after the end of the RRP implementation) up to 6% in the medium to long run. An additional 0.3% increase in the long-run can also arise from the impact of specific green taxation reforms. The latter assumes that introducing "green" taxes (in our model this takes the form of increases in the consumption tax rate) and at the same time using compensatory fiscal measures in a budget neutral way is not only be beneficial for the aggregate economy but can reduce inequality.

Concluding remarks and policy implications Indisputably, the menu of foreign shocks incorporated into our model to replicate the repercussions of EU sanctions on Russia for Cyprus indicate considerable negative impacts, at least in the short run. Moreover, the overall effect hinges critically on uncertainties regarding the sanctions' duration and the war at large. The current juncture offers a unique opportunity to small economies like Cyprus to move forward to a new growth model. In this regard, and taking lessons from the recent experience of the ongoing Russia-Ukraine war, it is imperative for Cyprus to reorient its services exports to other markets and destinations. Cyprus could leverage its unique geographical location in the Eastern Mediterranean along with its expertise in providing high quality tradable services in tourism and financial intermediation. In turn, the ensuing reduction of public debt and private sector deleveraging will act as buffers against future adverse shocks. Finally, as Chowdhry *et al.* (2024) point out burden-sharing policies such as fiscal transfers, could reduce the asymmetric impact of EU sanctions across different countries, including Cyprus. In this regard the timely and targeted implementation of investments and structural policies through the funds coming from the Recovery and Resilience Plan could alleviate and offset the economic costs from EU sanctions against Russia for the economy of Cyprus.

Box 1. Modelling the economy of Cyprus

Our General Equilibrium Model We use a fully-fledged medium scale micro-founded dynamic general equilibrium in a small open economy setup. Our model incorporates a number of nominal and real frictions as well as a detailed public sector including a rich menu of spending and tax instruments. In order to mimic, as good as possible the production of the Cypriot economy, we assume that economic activity in the private sector takes place a tradable and a non-tradable goods sectors. This is a key structural characteristic of Cyprus is its service-oriented economy. Notably, services accounted for nearly 84% of the country's GDP in 2020 and engaged more than 70% of the labor force. Key economic contributors encompass sectors such as tourism, professional and financial services, and real estate. Second, the external position of Cyprus. Cypriot public debt is being held by three different types of creditors: domestic private agents/banks, foreign private agents/banks, and EU public institutions. The latter refers to loans from the ESM and other euro states during the sovereign debt crisis and loans from the Recovery Fund during the pandemic (see Dimakopoulou *et al.*, 2022). Notice that, in the end of 2019 namely, just before the eruption of the pandemic crisis, around 60% of Cypriot public debt was owned by foreign entities. Moreover the foreign debt as share of GDP in Cyprus, (net international investment position), is about 120% of the GDP(or 80% excluding Special Purpose Entities), while the current account deficit is systematically high at around 9% (excluding SPEs).

Computational methodology The model is parameterized using Cypriot data and is then solved numerically for the period 2009 and 2019, that is for the period after Cyprus' entrance in the Euro Area up until the pre-Covid year. We solve the model under perfect foresight using a Newton-type non-linear method implemented in DYNARE.

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