Cyprus and EU Sanctions on Russia: Macroeconomic impacts and policies for recovery

Stelios Sakkas Konstantinos Mavrigiannakis University of Cyprus – Economics Research Centre

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This project in a nutshell

- We evaluate the macroeconomic impact of EU sanctions to Russia on the economy of Cyprus.
- We analyze policy approaches for sustained economic recovery, emphasizing investment policies and structural reforms included in the NextGenEU and Recovery and Resilience Plan.

- Motivation and Policy Context backed up by data
- Economic model and policy simulations methodology
- Main findings
- 4 Discussion

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Cyprus, Russia and EU Sanctions in the press



Israel-Hamas war Newsletters Podcasts Poli

NEWS > DEFENSE

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Cyprus is losing its Russians — and confronting existential questions about its economy

Cyprus has gone a long way toward untying its bonds to Russia. But with new wartime sanctions, it will have to untie many more, instantaneously.



EU Sanctions (cont'd)

- Sanctions against individuals: e.g. Putin, Lavrov, Russian State Duma members, Military staff, Oligarchs
- Economic Sanctions: Finance, Energy, Transport, Defense, Raw Materials and other Goods, Services
- ⇒ Aim: Weakening Russia's economic base, depriving it of critical technologies and markets.

EU Sanctions effectiveness



are put in their way.

Take the trade in crude oil. In 2022 around 60% of crude from western Russia was transported in European tankers. Then a price cap imposed by the 67 countries banned their carriers from shipping Russian oil unless it traded for less than \$60 a barrel. In response, a shadow infrastructure grew up that exists outside the control of the West, and which carriers much of Russia's oil at a higher price. These days more oil is being traded in Dubai and Hong Kong than in Geneva. The West's grasp on the global energy order has slipped accordingly.

how quickly global trade and financial flows find a path around barriers that

Since February 2022 America, Europe and their allies have together deployed

MAKE CAR. KORPOTT

Source: The Economist, February 24th, 2024

Literature on Sanctions

Economic Sanctions

- The Russian-Ukraine war and subsequent EU sanctions have reignited discussions on economic impact (Hufbauer and Jung (2020), Crozet and Hinz (2020), Garicano et al. (2022)).
- Sanctions' effectiveness as a response to terrorism, military conflicts, and foreign policy crises is debated.
- Research indicates a loss of potential for sanctions as a foreign economic policy tool (Felbermayr et al. (2021)).

Firm-Level Impact

- Sanctions exert negative impacts at the firm level.
- Exporting firms resort to sanction avoidance practices through neighboring countries.

Literature on EU sanctions to Russia

Macroeconomic Perspective

- Recent studies focus on the effects of reducing energy imports from Russia.
- Moll et al. (2022) estimate a GDP reduction of 0.2–3.0% for Germany due to a sudden stop of Russian gas imports.
- Baqaee et al. (2022) quantify impacts for selected EU countries, estimating GDP drops between 1–5%.

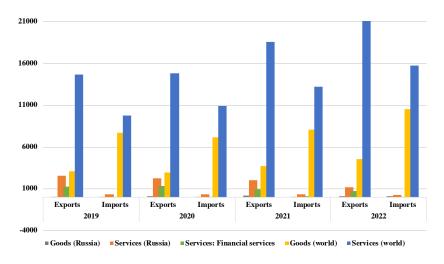
Impact on Cyprus

- Almazán-Gómez et al. (2023) report the worst outcome for Cyprus among European countries, with around a 6% reduction in aggregate output.
- Imbs and Pauwels (2023) report a 2.1% fall in Cyprus' GDP, higher than ex-satellite countries reliant on Russia for energy.

EU Sanctions and Cyprus (cont'd)

- Cyprus, as an EU member, must align with decisions made by the European Commission.
- Initial shock in Europe was tremendous especially for neighboring countries and Germany...
 - ...2 years after much less reliant on Russian energy imports
- But is Cyprus different?

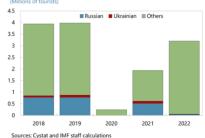
Balance of payments with Russia (goods and services, mln euros)



Source: Central Bank of Cyprus

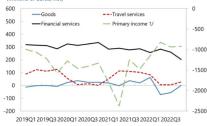
Balance of payments with Russia, 2019–2022

Tourist Arrivals (Millions of tourists)



Balance of Payments with Russia

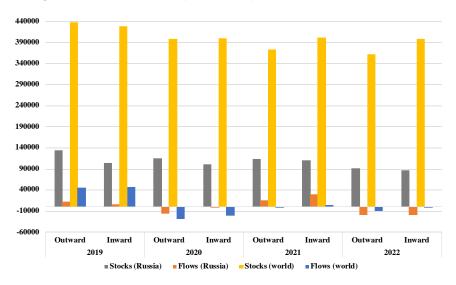




Sources: Haver and IMF staff calculations

1/ Excludes portfolio investment income and other primary income

Foreign Direct Investment (mln euros), 2019–2022



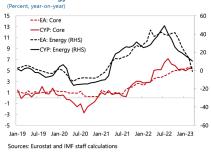
Source: Central Bank of Cyprus

Data: Price indexes evolution (y-o-y, %), 2019-2023

Contributions to HICP Inflation



Core and Energy Inflation



Just a bit before the war...

- Most economies around the globe were rebounding from the pandemic.
- Still they had to deal with inflationary pressures coming from pandemic's supply side disruption.
- Likewise, delayed consumption (tourism overheat etc.).
- EU tried to address all these challenges with the establishment of the NextGenerationEU and the Recovery and Resilience Facility (RRF) (around €670 bln in the form of grants and loans allocated to EU MS)

Just a bit after the war...

- The Russian-Ukraine conflict has posed significant challenges for the EU, particularly in energy capacity and trade, worsening the economic and social impacts of the Covid-19 crisis, which prompted the facility's establishment.
- Complementary to the RRF, initiatives like RePowerEU aim to bolster the EU's ability to enhance energy security, diversify energy sources, improve efficiency and decrease reliance on fossil fuels by 2030.
- The war reinforced the importance of the RRP and the need for a sustainable growth strategy

The Cypriot Recovery and Resilience Plan pillars

41% Green Transition and climate objectives

- Green Taxation
- Energy efficiency and renewables
- Energy interconnector
- Green mobility

23% Digital Transition

- Supporting connectivity
- Digitization of public services
- Promoting digital education and skills
- Digital health transition

Economic and Social Resilience

- Aggressive Tax planning
- Supporting early childhood, and youth employment
- Modernization of justice and business environment

- O Total spending of €1.2 bln = 4.8% of GDP, (grants and loans) over 2021-2026:
 - Public Investments
 - > Structural reforms

The Cypriot Recovery and Resilience Plan policy axes

	Policies	Grants and loans	% of total					
1.	Public health, civil protection							
	and lessons learned from the pandemic							
1.1.	Resilient and Effective Health System, Enhanced Civil Protection	74.10	6.01					
2.	Accelerated transition to a green economy							
2.1.	Climate neutrality, energy efficiency	269.00	21.81					
	and renewable energy penetration							
2.2.	Sustainable transport	91.30	7.40					
2.3.	Smart and sustainable water management	87.30	7.08					
3.	Strengthening the resilience and competitiveness of the economy							
3.1.	New growth model and diversification of the economy	166.40	13.49					
3.2.	Enhanced research and innovation	64.00	5.19					
3.3.	Business support for competitiveness	78.40	6.36					
3.4.	Modernizing public and local authorities,	96.00	7.78					
	making justice more efficient and fighting corruption							
3.5.	Safeguarding fiscal and financial stability	44.50	3.61					
4.	Towards a digital era							
4.1.	Upgrade infrastructure for connectivity	53.00	4.30					
4.2.	Promote e-government	36.40	2.95					
5.	Labour market, social protection, education and human capital							
5.1.	Educational system modernisation, upskilling and retraining	94.00	7.62					
5.2.	Labour market, social protection, social welfare and inclusion	78.90	6.40					
	Total	1233.30	100.00					

Modelling tools

- We use the Cyprus General Equilibrium Model (CypGEM).
 - In-house model developed by the Economics Research Center of the University of Cyprus for policy analysis.
- Builds on similar models used by international organizations and policy institutions
 - European Commission QUEST III model
 - O ECB, New Area Wide Model (NAWM)
 - O Bank of Greece (BoGGEM) General Equilibrium model etc
- ➤ Tailored to mimic stylized facts of the economy of Cyprus (e.g. sectoral activity, external position)

Aside: Do we trust these models?

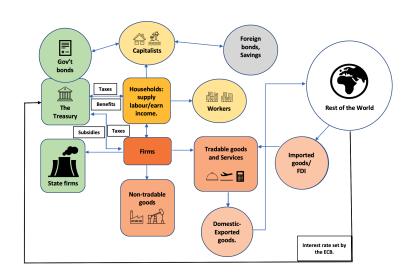
Chancellor Scholz on Germany's economic experts model predictions of an import ban of Russian gas:

"But they get it wrong! And it's honestly irresponsible to calculate around with some mathematical models that then don't really work."

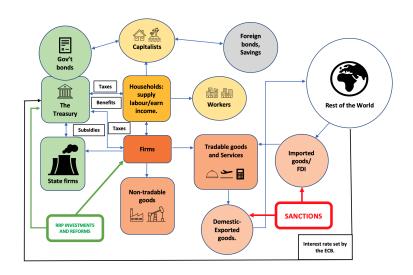
ECB's President Lagarde:

"Many economists are actually a tribal clique,". They are among the most tribal scientists that you can think of. They quote each other. They don't go beyond that world. They feel comfortable in that world. And maybe models have something to do with it."

The model: schematic illustration



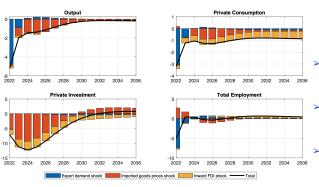
The model: schematic illustration with Sanctions and RRP



Sanctions simulations: A mix of foreign shocks

- 1 Direct: Export demand drop by 5% as a share of GDP (excluding SPEs)
- Direct: Inward FDI flows (Russia's share) drop by 100% (about 1% of GDP, excluding SPEs).
- Indirect: Increases in the prices of imported goods (calibrated to mimic the change in imported inflation)
- > Sanctions duration: A conservative/realistic assumption of 3 years.

Impact of sanctions (% deviations from baseline year)



- Real GDP falls by 5.5% in 2023 driven by exports and imported goods price hikes (average drop 2%, 2022-2025).
 - Inflation on imported goods causes significant long lasting harm
 - Private investment and hours worked drop by around 12.3% and 3%, respectively.
 - Sanctions in inward FDI affect only marginally real economic activity (0.2% GDP loss).

RRP simulations: Investment grants and loans

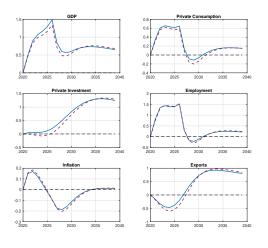
- > €1.2 bn over 2021-26
 - O €1 bn grants
 - O €200 mln loans
 - O A total of 4.8% of GDP in (2021)
- > Allocation:
 - O 67% to public investment
 - 33% to government consumption

- Grants are budget neutral
- Linear disbursement profile after 2021
 - 2021: pre-financing at 13% of funds
- > Full absorption by 2026

Planned RRP disbursements (% of GDP)

	2021	2022	2023	2024	2025	2026	Total
Grants	0.52	0.70	0.70	0.70	0.70	0.70	3.98
Loans	0.10	0.14	0.14	0.14	0.14	0.14	0.76
RRP	0.62	0.84	0.84	0.84	0.84	0.84	4.80

RRP investments impact (% deviations from baseline year)



- Real GDP increases by 1.5% in 2026
- Private investment and employment increase by 0.3% and 1.5%, respectively
- Improvement in the country's competitiveness triggers a rise in exports after 2026
- The tax revenues-to-GDP ratio increases by 1.6 pp (fiscal space)

- ullet Grants \Rightarrow production externalities from public investment \Rightarrow higher productivity of private inputs
- Grants \Rightarrow inflationary pressures \Rightarrow lower exports in the short run
- Implementation delays mitigate the positive effects (see red dashed line).

Mapping RRP reforms to model counterparts

- RRP pillars, policy axes and interventions come with reforms as well (not just investments):
- Map the reforms into the model counterparts. We quantify a subset of reforms that:
 - can be linked to structural indicators in the data (Product Market Regulation Index, EU Innovation Scoreboard, EU Justice Scoreboard)
 - > the empirical literature offers reliable estimates for the sensitivity of key economic variables with respect to changes in these indicators

Modelling RRP reforms

Product Market

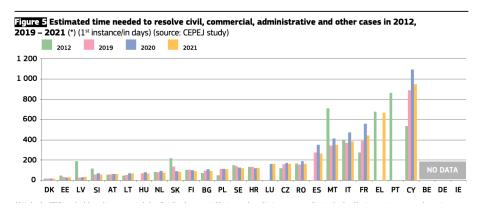
Labour Market



Productivity Enhancement via RRP Reforms

- 3.4: Modernizing public and local authorities, making justice more efficient and fighting corruption
 - Link to data:We use as a proxy of civil justice reforms the changes in the length of court proceedings index (EU Justice Scoreboard 2019); a 15% decrease in the length of proceeding increases TFP by 0.45%
 - **Expected Outcome**: Closing the Gap with Top performers by 50% after 10 years.
 - Simulation: 1.17 pp increase in TFP
- O 3.2: Enhanced Research and Innovation
 - Link to data: Proxy of innovation policy; Investment in R&D (EU Innovation Scoreboard 2019); 1% increase R&D increases TFP by 0.15%.
 - **Expected Outcome**: Closing the Gap with Top 3 performers by 50% after 10 years.
 - Simulation: 1.14 pp increase in TFP. Innovation

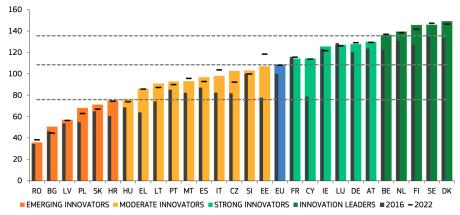
Empirical evidence: EU Justice Scoreboard





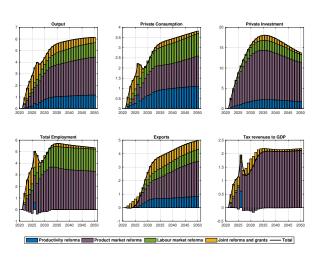
Empirical evidence: EU Innovation Scoreboard

Figure 1: Performance of EU Member States' innovation systems





RRP reforms cumulative impact on key macroeconomic variables



Overall effects by 2026:

- Real GDP increases by 4.5%
- Private investment increases by 15%
- Employment increases by 5%
- Tax revenues/GDP increase by 1.7 pp

Gains are long lasting (2050):

- > Real GDP increases by 6.2%
- Private investment increases by 12%
- Employment increases by 5%
- Tax revenues/GDP increase by 2.3 pp

Cyprus's economy after Russia's War

- ➤ EU Sanctions to Russia come with non-negligible effects on Cyprus' economic activity at least in the short-run:
- Uncertain for how long/how much because:
 - geopolitical context
 - exports re-orientation/substitution: does it happen?
 - ... to other markets
 - O ...or to Russia through other markets?
- > The full and timely implementation of the RRP constitutes a significant growth opportunity for the Cypriot economy
- ➤ In the short-run it can almost counterbalance the adverse effects of sanctions.

The economy of Cyprus after the

- > The current juncture may offer an opportunity to move to a new business model leveraging Cyprus's location and strong professional services to transform the country into a regional business and ICT hub. This comes with:
 - improved governance (including the control of corruption, rule of law, and regulatory quality)
 - improved competitiveness and quality in the product markets (e.g. maintain favourable corporate taxes but to compete for foreign companies/country on quality
 compare Cyprus with Lithuania for instance)
 - O Non Performing Loans: Still high. Contrary to the past capital in the form of FDI flies out of Cyprus, the borrowing capacity of the economy decreases because the amount of available collateral decreases as well.

Thank you!

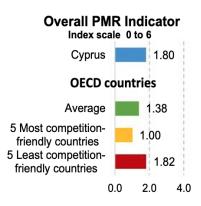
sakkas.stylianos@ucy.ac.cy erc@ucy.ac.cy

Enhancing Product market Competition via RRP Reforms

Indicative RRP Components:

- 3.1: Competitive sectors & high-value tourism
- 3.2: Linkage between research and industry
- 3.3: Business support for competitiveness
- Link to data: OECD's Product Market Regulation Index
- > Expected Outcome: 2019 PMR gap to EU Top 5 performers closes by 50% by 2030
- Simulation: Firms' price markup declines by 3pp

Product Market Regulation index



Empirical studies find that reductions in regulatory burden can decrease mark-ups in the product market by 1.8% (Égert and Morales-Zumaquero, 2008; Thum-Thysen et al., 2015).

Supporting Higher Labor Force Participation

Indicative RRP Components

- 5.1: Improving education, training, and skills, addressing skill mismatches.
- 5.2: Promoting job creation, female entrepreneurship, and flexible work arrangements

Expected Outcome: Cumulative increase in labor supply by approximately 2.5 percentage points by 2030.

A note on Balance of Payments Accounts in Cyprus

A special purpose entity (SPE) resident in an economy is a formally registered and/or incorporated legal entity recognized as an institutional unit, with no or little employment up to maximum of five employees.

- Large presence of Special Purpose Entities in Cyprus
- Significantly distorts external statistics picture
- SPEs are responsible for a very large proportion of primary income flows—i.e. income flows between resident and non- resident institutional units—in Cyprus' current account
- SPEs, which carry little domestic risks as financing entities and assets are typically abroad
- More than 85% inward FDI flows belong to SPEs
- Real FDI statistic approximately < 10% as a share of GDP.
- Still Russia ranks first largest FDI partner (excluding SPEs)