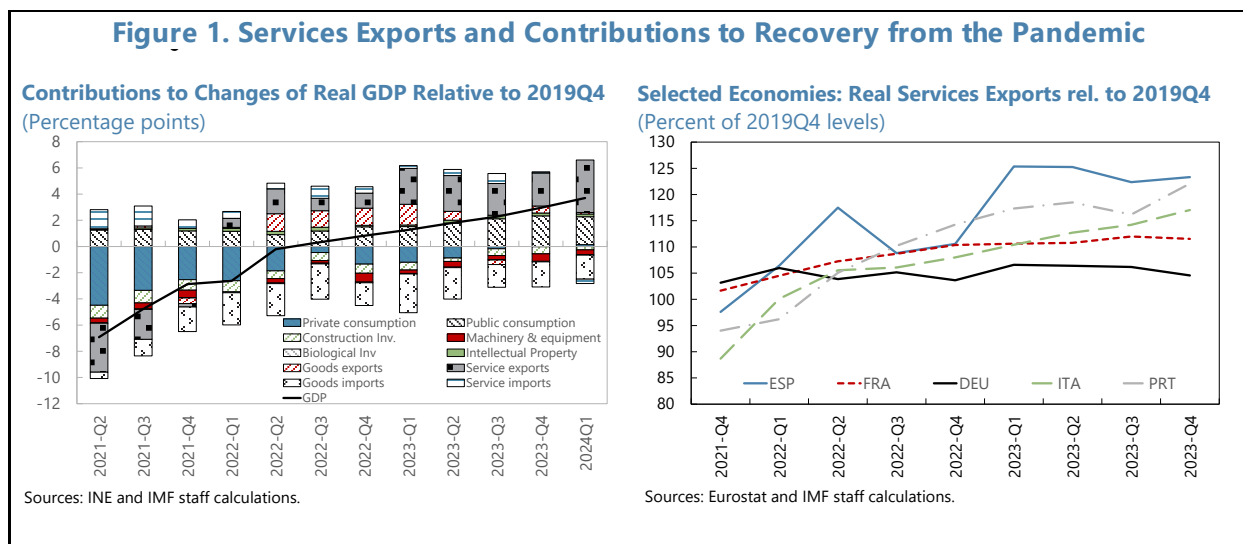


NON-TOURISM SERVICES EXPORT PERFORMANCE: DRIVERS AND IMPLICATIONS¹

A. Introduction

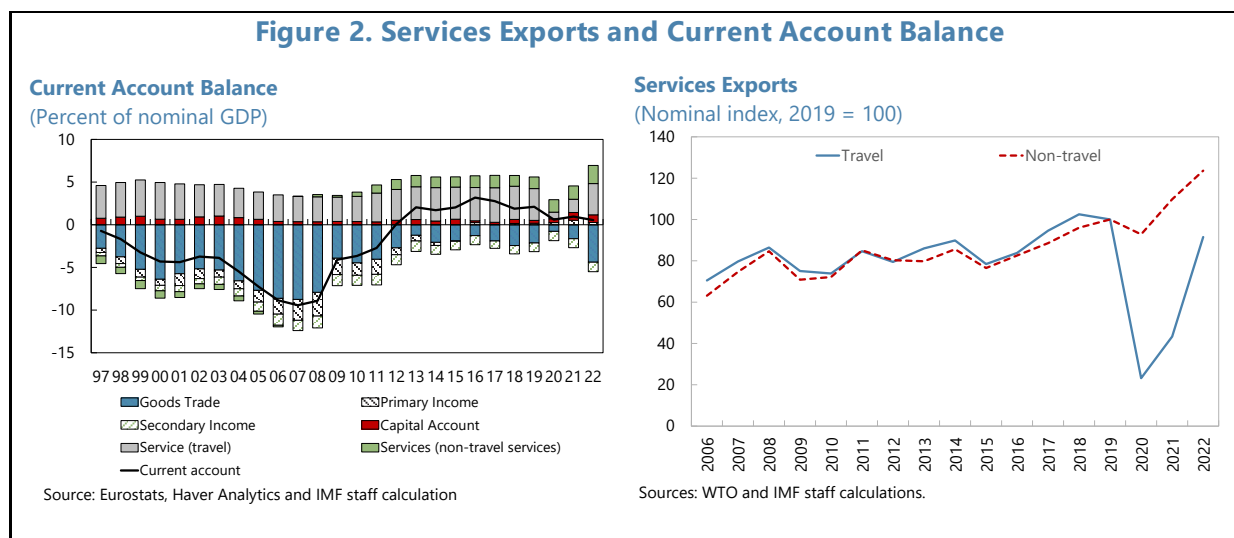
1. Spain's services export has exhibited strong performance since the pandemic, supporting the recovery and the economy's resilience through Europe's energy crisis. By the first quarter of 2024, Spain was no longer lagging the euro area in its recovery from the pandemic, with real GDP surpassing its end-2019 level by 3.7 percent. A critical factor contributing to this rebound has been the surge in services exports (Machuca and García, 2023), which were 23.3 percent above end-2019 levels by the first quarter of 2024 and compared favorably with European peers. Spain's strong recent export performance is particularly noteworthy given that Spain's main trading partners concentrate within the euro area, which recently experienced a significant economic slowdown due to the energy crisis.



2. Non-tourism² services have played an important role in the buoyant services export performance. Following the global financial crisis (GFC), Spain transitioned from being a net importer to a net exporter of non-tourism services, which contributed to the improvement of the current account balance. Further, the steady rise in non-services exports has proven to be resilient to shocks. They were only moderately affected by the pandemic, following which they quickly rebounded. This played a pivotal role in sustaining overall services exports performance amid the substantial disruptions in tourism activities.

¹ Prepared by Yu Shi (EUR)

² Services activities are classified either as tourism versus non-tourism or travel versus non-travel in different database. In this chapter, we therefore use the two terms interchangeably.

Figure 2. Services Exports and Current Account Balance

3. This paper aims to examine the strong performance of non-tourism services exports and identify its main drivers, including improvements in cost and non-cost competitiveness.

The first part of the analysis uses the bilateral flows of services trade across various types of services activities for 169 countries from 2000 to 2019. Employing a shift-share approach (detailed further below in section B), this study dissects the overall growth rate of non-tourism services exports into three main components: trend growth of importers demand (geographic specialization effect), trend growth of sectoral demand (sectoral specialization effect), and idiosyncratic performance of the exporting country considered (performance effect). The evolution in estimated exporter performance effects over time is then mapped to changes in country-level cost competitiveness, proxied by the unit labor cost (ULC)-based real effective exchange rate (REER), and other non-cost competitiveness measures, including product market deregulation and services trade liberalization. The second part of the analysis focuses on the post-pandemic period more specifically, documenting further possible forces including the solid productivity growth of non-tourism services sectors.

B. Data and Empirical Strategy

Data

4. The database on bilateral services trade flows trade covers 265 countries and 17 distinct services activities spanning from 2000 to 2019. The microdata originates from the International Trade and Production Database for Estimation (ITPD-E) compiled by the US Department of Commerce. The ITPD-E database contains consistent data on international and domestic trade at the industry level covering agriculture, mining, energy, manufacturing, and services. Crucially for econometric analysis purposes, the ITPD-E is constructed using reported administrative data and does not include information estimated by statistical models. In the case of Spain, 66 percent of the data sample was sourced from importer's reports of services imports from Spain, thereby helping address the issue of inadequate statistical reporting of services exports. Also,

the aggregate sectoral trends of Spain's services exports broadly match those reported by the World Trade Organization (WTO).

5. Country-specific indicators for both cost and non-cost competitiveness indicators are collected from a variety of sources. Cost competitiveness is measured using the ULC-based REER index from the IMF's International Financial Statistics. For non-cost competitiveness, we include the following cross-country indicators from various databases: 1) Services Trade Restrictiveness Index from the OECD; 2) OECD Product Market Regulation Index and its subcomponents; 3) Digitalization indicators such as the percentage of firms using internet in their businesses, also from the OECD. The EU-KLEMS database is utilized to quantify services sectoral-level productivity growth and its primary drivers before COVID, while the national accounts data from Eurostat are used to look at productivity trends post-COVID.

Methodology

6. A shift-share analysis is used to separate the exporter-specific performance from other factors affecting the overall growth of a country's non-tourism services exports relative to the world average. Following Cheptea et al. (2012) and Gaulier et al. (2013), we break down the growth rate of exporter i 's non-tourism services exports relative to the total growth rate of global exports into: i) the geographic effect—the overall growth in imports of exporter i 's trading partners, weighed by the lagged shares of bilateral trade in exporter i 's total non-tourism services exports; ii) the sectoral effect—the overall export growth of services activities in which exporter i specializes, weighted by the lagged shares of sectoral exports in total exports; and iii) the idiosyncratic exporter performance effect—the residual term. The two steps for estimating the exporter performance can be summarized as:

Step 1: Estimate exporter (i), importer (j), and services sector (k) fixed effects using the (value) growth rate of bilateral trade flows, g_{ijkt} :

$$g_{ijkt} = \lambda^t + \alpha_i^t + \beta_j^t + \gamma_k^t + \epsilon_{ijkt}$$

t : four periods³ – 2004 to 2007, 2008 to 2011, 2012 to 2015, and 2016 to 2019

Step 2: Estimate **country-specific performance** of exporter i in period t , $Perf_i^t$:

$$g_{it} - g_{world,t} = Perf_i^t + \underbrace{\sum_j \frac{\omega_{ij,t-1}}{\omega_{i,t-1}} (\hat{\beta}_j^t - \sum_j \omega_{j,t-1} \hat{\beta}_j^t)}_{Geographic_j^t} + \underbrace{\sum_k \frac{\omega_{ik,t-1}}{\omega_{i,t-1}} (\hat{\gamma}_k^t - \sum_k \omega_{k,t-1} \hat{\gamma}_k^t)}_{Sectoral_k^t}$$

ω : export volumes as a share of total world exports

³We use data starting from 2004 due to limited data availability for a significant number of countries in the early 2000s. The sample is methodically segmented into four equal periods, each spanning four years. This strategy is used to minimize the influence of outliers on our estimations and to account for the delayed effects that changes in the REER may have on export performance.

7. We proceed by estimating an error-correction model to examine the relationship between country-specific export performance and both cost and non-cost competitiveness factors. We start with a model that captures both the long- and short-run dynamic relationship between country-specific export performance and cost competitiveness. It is estimated in two steps. In the first step, the long-run relationship is formulated as follows:

$$\log Ind_{perf}^{i,t} = \alpha_1 + \beta_1 \log REER^{i,t} + \tau^i + \epsilon_1^{it}$$

where Ind_{perf} is the country-specific export performance index normalized to a value of 100 for the first period 2004-2007.

In the second step, we explore the short-term dynamics of the relationship between export performance and cost competitiveness by estimating the following specification:

$$\Delta \log Ind_{perf}^{i,t} = \alpha_2 + \beta_2 \Delta \log REER^{i,t} + \rho_2 \widehat{\epsilon_1^{it-1}} + \kappa^t + \epsilon_2^{it}$$

where $\widehat{\epsilon_1^{it-1}}$ is the 1-period lagged residual term from the first stage of the model, i.e. the error correction term.

We then turn to assessing the impacts of both cost and non-cost competitiveness on export performance, focusing on how non-cost competitiveness factors can affect the response of exports to cost competitiveness. This aims to capture the idea that structural reforms—such as deregulation of network industries that improves the availability and quality of infrastructure in electricity or information, communication and technology (ICT), for example—can enable countries to reap larger export gains from improvements in cost competitiveness. Specifically, we adopt the following specification that incorporates both cost- and non-cost-competitiveness indicators and the interaction term between them:

$$\Delta \log Ind_{perf}^{i,t} = \alpha_3 + \beta_3 \Delta \log REER^{i,t} + \gamma_3 D^{i(t-1)} + \lambda_3 \Delta \log REER^{i,t} \times D^{i(t-1)} + \rho_3 \widehat{\epsilon_1^{it-1}} + \kappa^t + \epsilon_3^{it}$$

where D is the one-period lagged indicator of non-cost competitiveness when the latter has a time-series dimension and thereby varies across the sample periods (e.g. OECD indicators of product market regulation); and it is fixed at the earliest available indicator value when there is little or no available variation over time (e.g. indicator of services trade restrictiveness). The key coefficient of interest is λ_3 , which captures impact of the non-cost competitiveness indicator on the elasticity of export performance to the REER.

C. Results

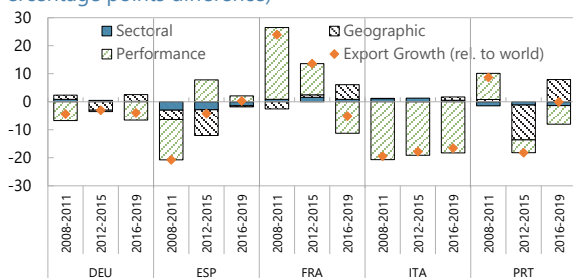
Decomposition of Non-Tourism Export Growth Prior to the Pandemic

8. Spain's performance in non-tourism services exports has been on an upward trajectory since before the pandemic. Following the GFC, Spain's non-tourism services exports growth has been converging with the global average, in contrast to its euro area peers whose market shares declined. The geographic specialization effect had a detrimental impact on the growth of non-

tourism services exports, especially during 2012-15. This reflects Spain's concentration of non-tourism services exports within Europe, in contrast with Germany or France which exported a substantial portion of their services to outside of the EU. The sectoral specialization effect, though smaller, also negatively influenced Spain's non-tourism services export performance, primarily due to global downturns in transportation activities and wholesale and retail trade. These sectors were among the most adversely impacted during the GFC and the euro area crisis. By contrast, the analysis suggests that Spain's own export performance has been positive since the euro area crisis, indicating that Spain could have surpassed the global average if not for the drawbacks from unfavorable sectoral specialization and export market effects during this period. It is also worth noting that sub-periods of positive country-specific export performance typically coincided with periods of REER depreciation, tentatively suggesting that the latter contributed to the former. To examine this connection between export performance and cost competitiveness, we now turn to the estimation of an error-correction model.

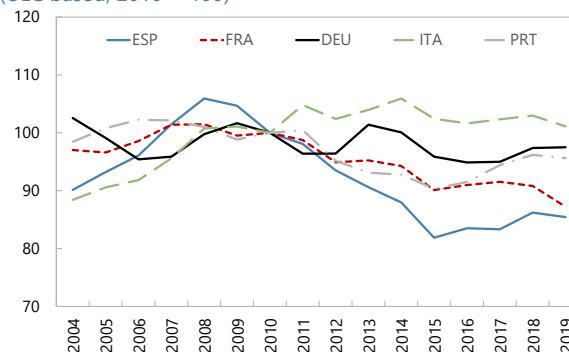
Figure 3. Non-Tourism Services Exports Growth and Drivers

Non-Travel Services Export Performance and Drivers
(Percentage points difference)



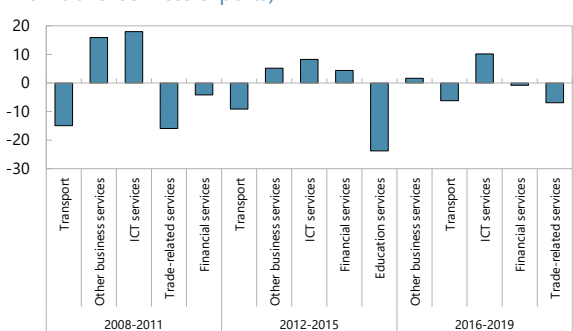
Sources: WTO, IMF WEO, ITPD-E, and IMF staff calculations
Note: The chart shows the difference between country-specific services export growth and world average growth, as well as the decomposition into sectoral (industry specialization), geographic (trading partners), and country-specific export performance (residual) effects.

Real Effective Exchange Rate
(ULC based, 2010 = 100)



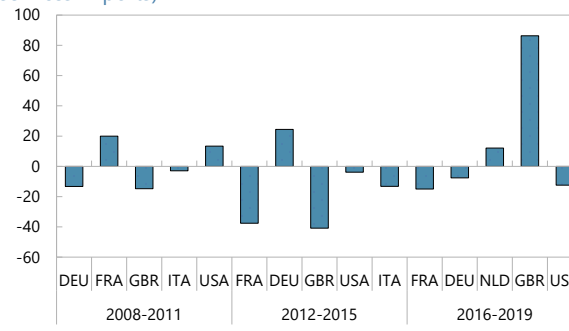
Sources: IMF.

Relative Trend Growth of Key Exporting Services
(Percentage points difference relative to world growth rate of all non-travel services exports)



Sources: ITPD-E and IMF staff calculations.

Relative Trend Import Growth of Key Importers
(Percentage points relative to world growth rate of non-travel services imports)



Sources: ITPD-E and IMF staff calculations.

The Impact of Improvements in Cost and Non-Cost Competitiveness

9. The error-correction model indicates that the enhanced performance of Spain's non-tourism services export since the euro area crisis partly reflects improved cost competitiveness.

Using a data sample containing euro area countries, a statistically significant negative relationship is identified between the index of ULC-based REER and country-specific non-tourism services export performance, in both the long term and the short term. With all non-time-varying country characteristics controlled for through country fixed effects, the long-term coefficient estimated in the first stage suggests that a 10-percent REER depreciation—indicative of more cost-competitive export activities—is associated with a 10 percent relative (*vis-à-vis* the world average) increase in exports. In the short term, the elasticity estimated in the second stage comes out at -0.24, suggesting that a 10 percent REER depreciation would lead to an additional 2.4-percentage-point increase in non-tourism services export growth (relative to the world average) during the same period. These findings imply that the substantial depreciation in REER observed in Spain since the GFC has been an important factor driving enhanced non-tourism services trade performance, which explained about three-fourths of the actual improvements from 2008-12 to 2016-19.

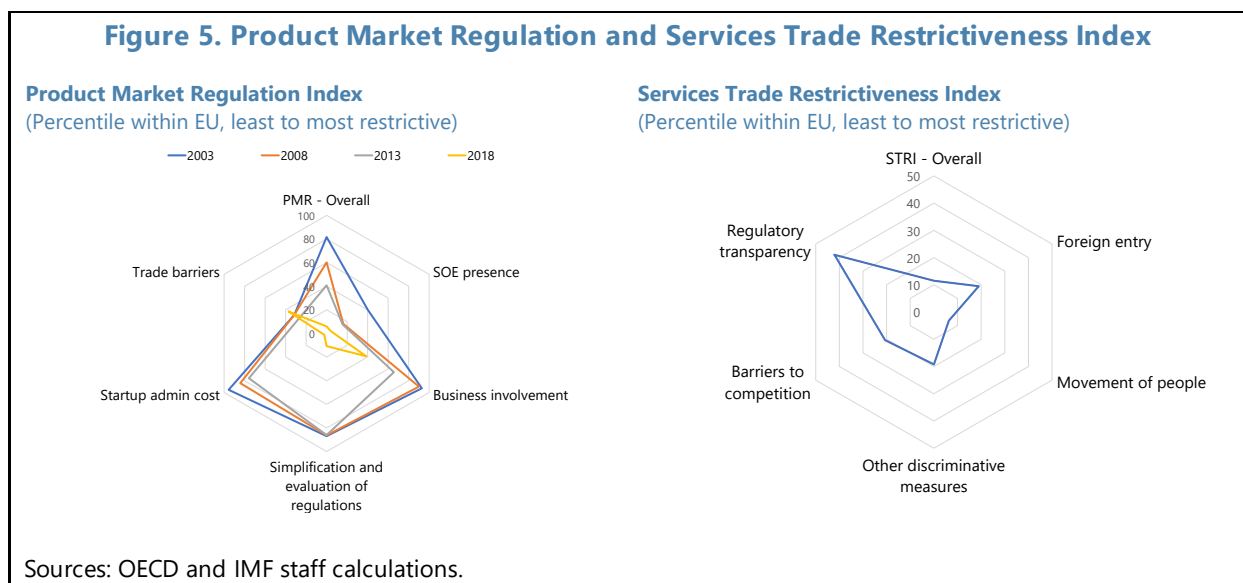
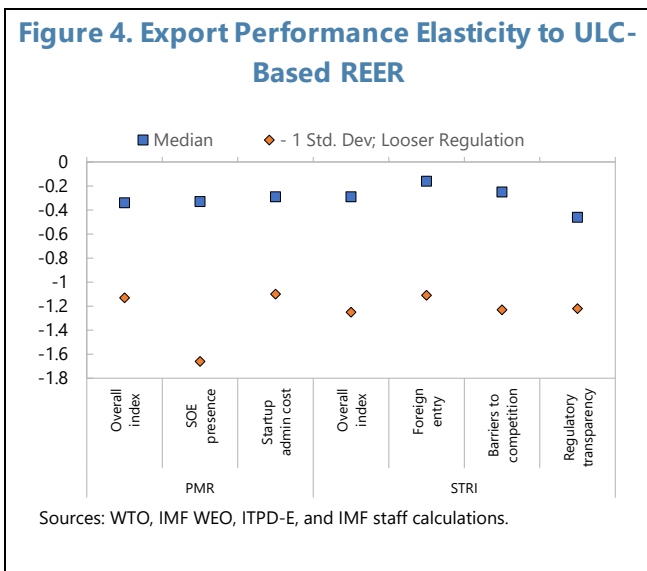
Table 1. Spain Non-Tourism Services Export Performance and Cost Competitiveness

Stage 1	Log (Performance Index)
Log ($REER_{ULC}$)	-1.01** (0.24)
Country FE	Yes
No. of Obs.	52
Adj. R-squared	0.48
Stage 2	Δ log (Performance Index)
Δ log ($REER_{ULC}$)	-0.28* (0.16)
Stage-1 residual, lagged	-0.85*** (0.12)
Time FE	Yes
No. of Obs.	39
Adj. R-squared	0.24

10. Improvements in non-cost competitiveness, such as through product market deregulation, may have also amplified the non-tourism services export gains from improved cost competitiveness.

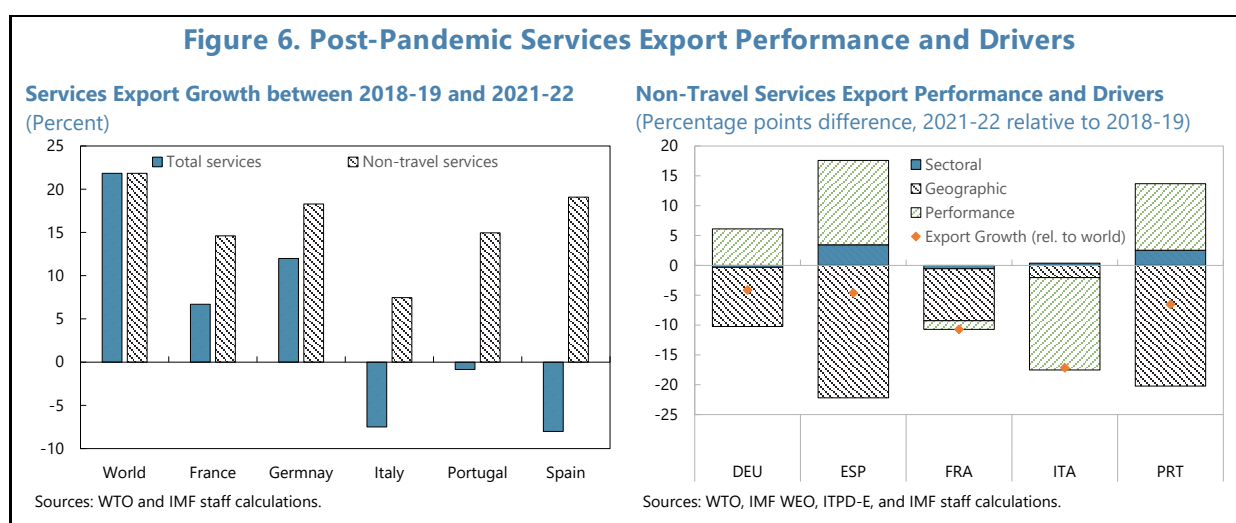
Using the alternative specification of the second stage of the error-correction model that incorporates non-cost competitiveness measures and their interaction with the ULC-based REER, we find that non-cost competitiveness may affect how export performance reacts to REER changes. When using either product market regulation or services trade restrictiveness indices as indicators for non-cost competitiveness, is the interaction term comes out negative and statistically significant. This indicates that, for a given extent of REER depreciation, countries with less regulated product markets or less

restrictive services trade regulations experience greater improvements in export performance. Since the GFC, Spain has undertaken significant product market deregulation; by 2018, the overall index of the stringency of product market regulation, along with indices for various sub-categories, stood below those of the majority of other EU countries. This considerable deregulation, coupled with the REER depreciation, likely played a key role in elevating the country’s non-tourism services export growth. At the same time, it is hard to pin down their exact roles given the limitations of the identification strategy adopted here—in particular, the presence of potential omitted variable bias, i.e. other potential significant interactions with other non-cost-competitiveness factors.



Post-Pandemic Export Performance

11. Spain's non-tourism services export performance has seen further improvement since the pandemic. Overall services export growth in 2021-22 was way below the global average, primarily due to the substantial impact of the pandemic on the tourism sector, which accounted for around 52 percent of the country's total services exports pre-pandemic. However, focusing solely on non-tourism services exports reveals that Spain's export growth since the pandemic onset has aligned closely with the global aggregate growth rate and outperformed euro area peers. Given the adverse geographic effect stemming from the predominance of Europe in Spain's services exports, and the only mildly positive sectoral effect from sectors such as ICT and professional services—areas in which Spain had begun specializing even before the pandemic—Spain's non-tourism services export performance has been notably robust.

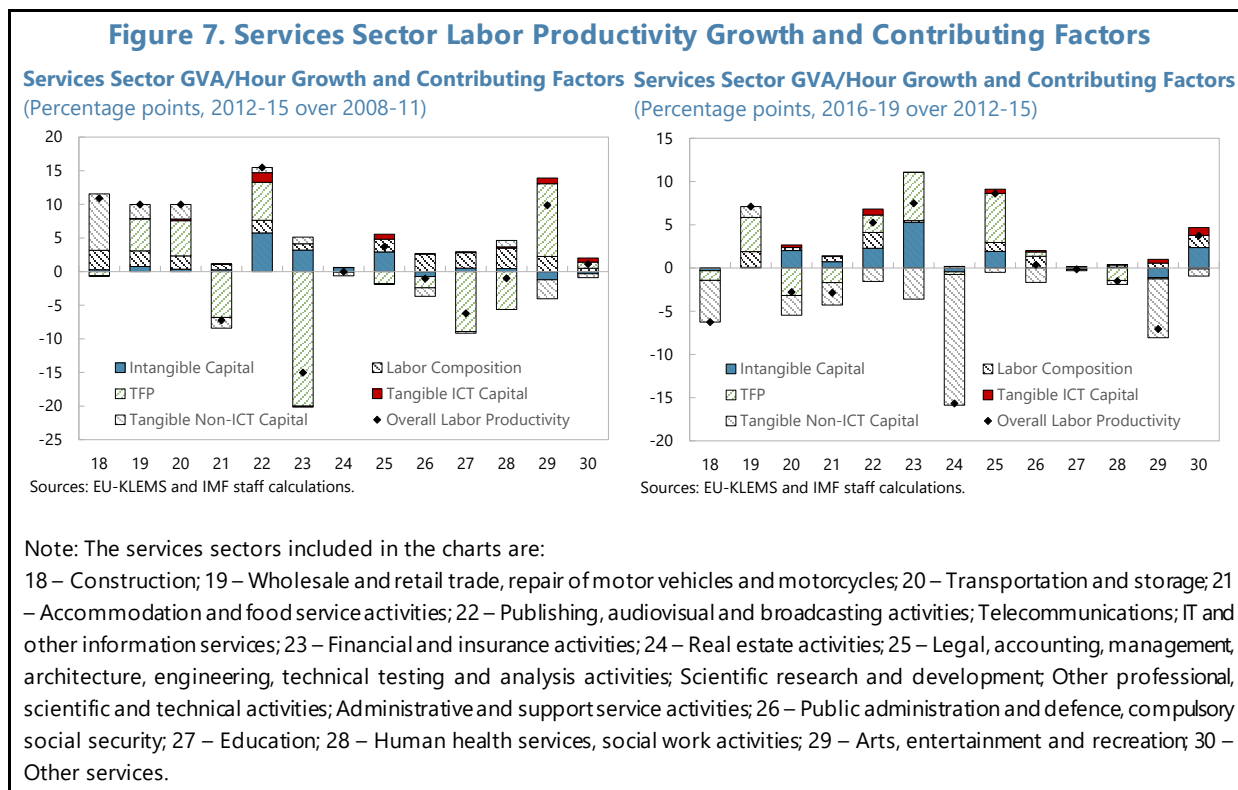


D. Productivity Growth in Services Sectors

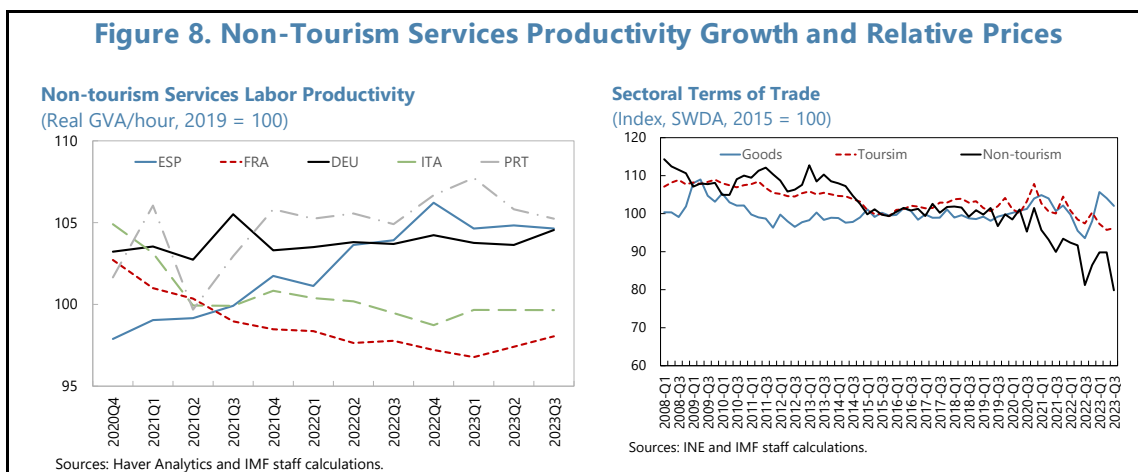
12. Productivity Growth in services sectors can be both a driver and an outcome of strong services export performance. All else equal, high productivity growth in services can lower ULCs and thereby depreciate the ULC-based REER (improvement in cost competitiveness), while also expanding the variety and quality of services (improvement in non-cost competitiveness). Conversely, higher services exports may improve productivity growth in services through various channels including scale or learning-by-doing effects, for example. With this in mind, and without taking a stand on the direction of causality—which can be two-way—here, this section documents recent productivity trends in Spain's key tradable services sectors, including in international comparison.

13. Key tradable services sectors experienced sustained growth in labor productivity alongside the improvement in export performance. Using EU-KLEMS, we quantify the key proximate drivers of sectoral productivity growth across all services sectors before the pandemic. These data suggest that sectors such as wholesale and retail trade and repairs, telecommunications, and professional services, including legal and accounting services, have seen positive labor

productivity growth since 2012, reflecting changes in labor composition, accumulation of intangible capital, and improvements in TFP. This productivity growth performance was typically stronger than in other sectors of the Spanish economy.



14. Labor productivity in non-tourism services sectors, more specifically, has continued to grow steadily since the pandemic. Spain’s labor productivity growth performance in non-tourism services has been among the strongest within the euro area. Concurrently, the terms-of-trade for non-tourism services, as indicated by the ratio of the export price index to the import price index, have experienced a significant decline in recent years. This contrasts with the relatively stable ratio observed in goods trade and tourism sectors.



E. Conclusion

15. This paper delves into the performance and drivers of non-tourism services exports in Spain. Since the GFC, Spain's non-tourism services exports have been on an upward trajectory, playing an increasingly important role in enhancing the country's current account balance. This positive trend gained further momentum during and after the pandemic, bolstering Spain's economic recovery despite continued weak domestic demand and sluggish growth in goods exports due to the slowdown in the euro area. A shift-share analysis, which isolates Spain's own export performance from the export market (geographic specialization) effect and the sectoral specialization effect, indicates that Spain has demonstrated robust performance in the non-tourism services export market since 2012, a trend that accelerated further post-pandemic. Econometric analysis suggests that the observed improvements in non-tourism services exports can be attributed to enhancements in both cost competitiveness—as indicated by the significant depreciation in the ULC-based REER following the GFC—and non-cost competitiveness, including a series of deregulatory measures undertaken by Spain in product markets and services trade. Additionally, sustained productivity growth in key tradable services sectors might have also helped bolster Spain's cost competitiveness and, in turn, enhanced non-tourism services export performance might have helped productivity gains.

16. Going forward, continuing to address product market inefficiencies while improving labor productivity growth will be key to sustaining the strong non-tourism services export performance. Given the important role of cost and non-cost competitiveness in supporting the performance of non-tourism exports, it is essential to maintain hard-earned cost competitiveness gains and seize upon the remaining opportunities for enhancing efficiency in product markets. These include addressing the distortions encountered by firms, including reevaluating the extensive array of size-related rules and regulations, persisting in efforts to harmonize the regional regulatory frameworks to build a fully integrated Spanish internal market in which the most productive firms can more easily scale up, and fostering product market competition. Supporting ongoing productivity growth in key tradable services sectors, including by facilitating innovation and talent acquisition, could further improve cost competitiveness in these areas by enabling wages to grow steadily without putting significant upward pressure on ULCs.

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