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EXECUTIVE BOARD MEETING

SM/22/280
Correction 1

January 11, 2023

To: Members of the Executive Board

From: The Secretary

Subject: **Spain—Selected Issues**

Board Action:	The attached corrections to SM/22/280 (12/19/22) have been provided by the staff:
Evident Ambiguity	**Page 24**
Factual Errors Not Affecting the Presentation of Staff's Analysis or Views	**Page 12**
Questions:	Ms. Iakova, EUR (ext. 35365) Ms. Shi, EUR (ext. 37438) Ms. Lariau, EUR (ext. 35779) Mr. Arregui, EUR (ext. 38456)

Examples of Size-Dependent Regulations

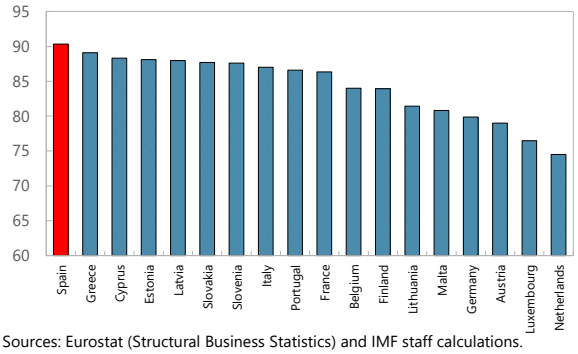
	Labor	Accounting 1/	Tax
>= 10 employees	Employees have the right to elect representatives with 15 hours per month paid	Not eligible for simplified accounting if the company has either 1) assets of more than EUR 1 mn or 2) sales of more than EUR 2 mn	Monthly VAT and income tax retention settlement if company has sales over EUR 6mn.
>= 50 employees	The employee representatives are elected as members of a works council (comité de empresa)	Not eligible for simplified balance sheets if the company has either 1) assets of more than EUR 4mn or 2) sales of more than EUR 8mn	~~Lose access to fiscal incentives in corporate tax if sales over EUR 10mn~~

Source: CEPYME.

1/ The accounting regulations would apply if companies meet both conditions related to assets and sales, regardless of its total number of employees.

Euro Area: Share of Firms with 1-9 Employees

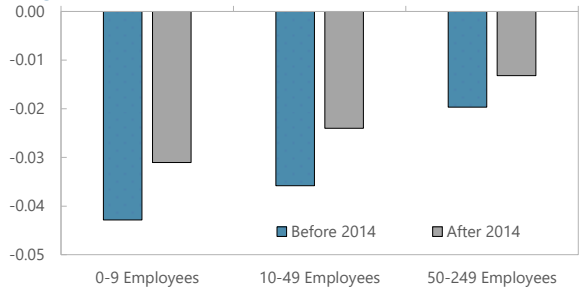
(in percent of total enterprises, 2019)



Sources: Eurostat (Structural Business Statistics) and IMF staff calculations.
Note: Ireland is not included due to data availability.

Total Factor Productivity (TFP) and Firm Size

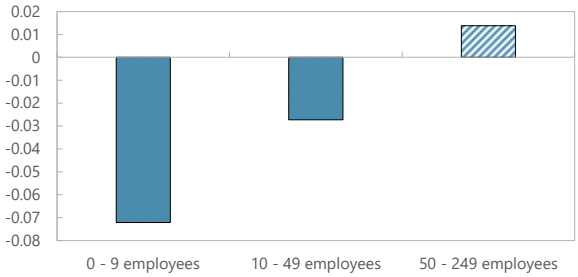
(in log differences)



Sources: Orbis BvD database and IMF staff calculations.
Note: The chart shows the difference relative to the group of large firms with 250 or more employees, controlling for firm-specific characteristics and region-industry-year fixed effects.

Firm Marginal Cost of Labor Across Different Sizes

(in log differences)

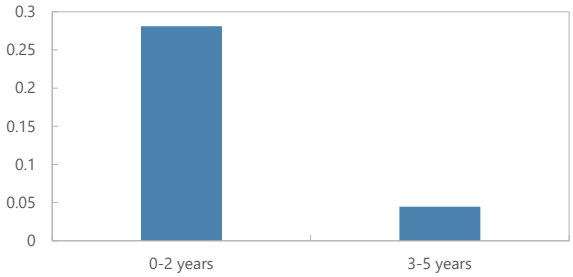


Sources: Orbis BvD Database and IMF staff calculations.
Note: The chart shows the difference relative to the group of firms with 250 or more employees, controlling for firm-specific characteristics. The shaded bars imply that the differences are statistically insignificant.

16. The long-standing structural challenges in the labor market can be another source of inefficiency preventing more efficient allocation of the workforce, particularly for the young firms. Dolado et al. (2011) found that across different sectors, young firms in general use a larger share of temporary contracts, which also implies a higher risk of employment instability for these firms. This can be rationalized by the fact that newer firms are forced to make a more widespread use of flexible temporary contracts for precautionary reasons. In addition, young firms could face higher labor search costs compared to established franchises (Minkler, 1992). Finally, the rigidity in the labor market could also have prevented these young firms from expanding their production to the desirable scale. Using the growth accounting framework, we verify again that startups (with an age of less than 2 years) and young firms (with an age of 3–5 years) have a higher labor wedge, suggesting more distortions facing

Firm Marginal Cost of Labor Across Age Groups

(in log differences)



Sources: Orbis BvD Database and IMF staff calculations.
Note: The chart shows the difference relative to the group of firms 6 or more years of experience, controlling for firm-specific characteristics. The shaded bars imply that the differences are statistically insignificant.

the RTRP and on the stock of fixed assets by industry from Eurostat. The analysis is based on the NACE Rev.2 sectoral disaggregation at the 1-digit level, covering 18 sectors.

Main Green Investments Under the Recovery Plan

Project	Sector	EUR million 2021–23	% of 2018 Capital Stock
Sustainable, safe and connect mobility	Transport	13203	6.39
Building renovation and urban renewal	Construction	6820	1.93
Deployment and integration of renewable energy	Eletricity, gas, power	3165	
Roadmap for renewable hydrogen	Eletricity, gas, power	1555	6.62
Energy infrastructures, smart networks, storage	Eletricity, gas, power	1365	
Conservation and restoration of ecosystems and biodiversity	Agriculture	1642	2.89
Preservation of the coastline and water resources	Water and waste management	2091	3.64

Sources: OECD and IMF staff calculations.

5. We use input-output linkages across sectors to estimate the impact of green investments on output and employment. The direct and indirect multipliers for each sector are computed using the 2018 (latest available) input-output table for Spain. In principle, higher labor productivity for a given sector implies lower relative prices, and lower production costs for downstream sectors. Thus, well-connected upstream sectors, such as mining, transportation, and support services, are expected to see large indirect impact on aggregate output. We used NACE 2-digit sectors for analyzing the propagation of green investments along the input-output network.[4] See Annex I for details on the calculation of the output and employment multipliers.

Carbon Pricing

6. We quantify the impact of changes in carbon pricing on employment using estimates from the literature. The estimated impact of carbon pricing on sectoral output is taken directly from Aguilar, González and Hurtado (2022)**.** These authors already incorporate the propagation of carbon pricing through input-output linkages. They compute changes of sectoral GVA in four carbon-pricing scenarios: (i) an increase in the price of CO2 emissions from €25 to €100 per ton; (ii) an expansion of the coverage of the ETS system, to fully cover all emissions from all firms, of all sectors; (iii) a combination of (i) and (ii); and (iv) a combination of (i) and (ii) with the revenue from those measures used to finance a reduction in labor taxes. For our baseline analysis, we map changes in sectoral GVA to changes in employment using the results from scenario (iv). We also produce an alternative scenario based on (iii); detailed results are reported in Annex II. The difference between the two scenarios highlights the importance of using carbon revenues effectively to reduce distortionary taxes and support growth.

[4] In order to map the investment shock at the 1-digit sector to the 2-digit level input-output table, we assume the same investment shock (in percent change of sectoral capital stock) to each subsector with in the same 1-digit sector.