

Weak business investment in Spain following the pandemic: an analysis based on the Banco de España Business Activity Survey

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Rationale

Business investment has been notably weak in Spain in the past few years. This article analyses recent developments in such investment, the limiting factors and the role played by the Next Generation EU (NGEU) funds, drawing on information from a specific module included in the Banco de España Business Activity Survey (EBAE).

Takeaways

- The largest and most productive firms report greater momentum in their investment decisions, while firms with more idle capacity report less buoyant investment.
- The obstacles to investment most often reported by firms are uncertainty over economic policy, the outsourcing of production processes and business regulation.
- A total of 45% of firms with NGEU-funded projects stated that they would not have made such investments without the support of this programme, while 31% would only have made a portion of them, suggesting that these funds have a relatively high degree of additivity. However, lower additivity is observed in the case of green investments.

Keywords

Business investment, economic outlook, NGEU funds.

JEL classification

E22, E44, H32, L25.

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Weak business investment in Spain following the pandemic

Although Spanish GDP has recovered significantly in recent years, business investment – a key determinant of productivity growth – has shown considerable weakness, with growth rates below output growth.¹ In 2024 Q3, productive investment (i.e. excluding housing investment) remained below pre-pandemic levels (-1.6%), with considerable heterogeneity by type of capital (see Chart 1.a). Investment in transport equipment has been the slowest to recover, standing 26.5% below pre-pandemic levels in 2024 Q3, while investment in intangible assets has performed well, exceeding 2019 levels by 15.7%. Investment in other construction is 7.8% below its pre-pandemic level and machinery (excluding transport equipment) is 4.2% higher, although growth has remained flat in both components in the most recent period.

Private productive investment has been particularly weak in Spain, falling from 12.6% of GDP in 2019 to 10.7% in 2024.² Conversely, public investment has increased since the onset of the pandemic, to more than 2.8% of GDP in 2024, compared with 2.2% in 2019 (see Chart 1.b). The strength of this component is partly due to public sector investments triggered by the health crisis and to the roll-out of NGEU funds.³

Against this backdrop, the Banco de España Business Activity Survey (EBAE) included, in its 2024 Q2 edition, a specific module on recent and expected developments in business investment and its determinants, in which more than 6,500 firms participated.⁴ This module, combined with the granular information drawn from the Banco de España's Central Balance Sheet Data Office integrated database (CBI),⁵ has enabled more in-depth analysis of business investment decisions and how they relate to different firm characteristics. In addition, the survey has collected information on firms' participation in the NGEU programme, their use of the funds and the role these have played in driving business investment.⁶

Characteristics of the most investment-intensive firms

According to the survey results, firms report, on average, an increase in total investment over the past 12 months and somewhat lower growth expectations for the coming 12 months,⁷ albeit with

1 For an analysis of investment in recent years, see Banco de España (2024). For an analysis of business investment since the outbreak of the pandemic, see González-Simón, Jiménez-García and Martínez-Carrascal (2024).

2 Average for the first three quarters of 2024.

3 For an estimate of the impact of NGEU funds on potential growth, see Domínguez-Díaz, Hurtado and Menéndez (2024). Fernández Cerezo, Moral-Benito and Quintana (2023) analyse their impact from a sectoral perspective.

4 Fernández Cerezo and Izquierdo (2024).

5 The CBI contains comprehensive information on the financial statements and profit and loss accounts of almost 800,000 Spanish non-financial corporations on average for each financial year up to and including 2023. This article draws on the CBI for 2023 and, where information is not available for specific firms, on the CBI for 2022.

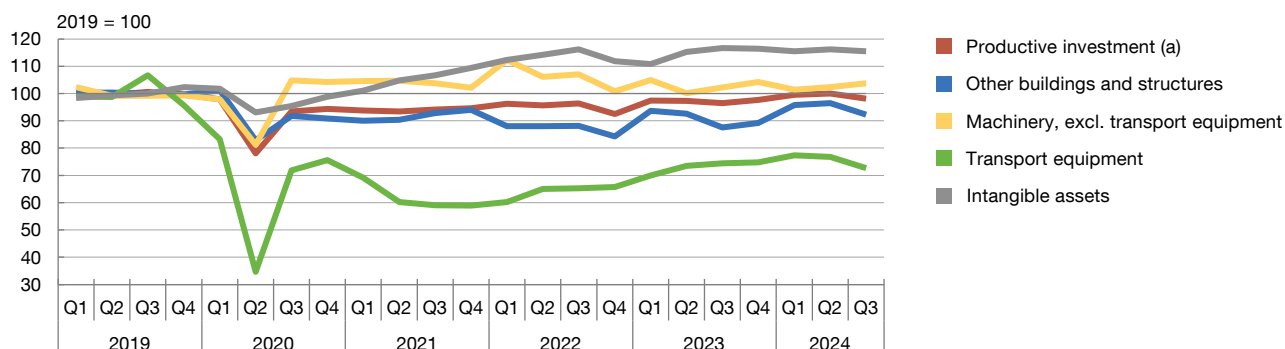
6 For a description of the characteristics of recipients of NGEU funds, see Aguilar García, Alloza Frutos, Mata, Moral-Benito, Portillo Pampin and Sarasa Flores (2023).

7 Specifically, the share of firms reporting higher investment in the last 12 months is 27%, but 22.6% for the coming 12 months. The share of firms reporting a decrease in their investment levels is 12.3% in the last 12 months and 10.6% for the next 12 months.

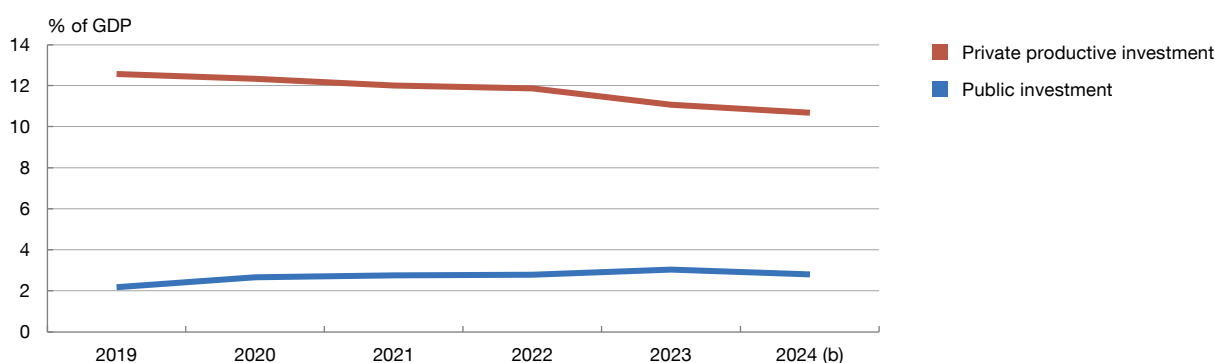
Chart 1

Recent developments in investment in Spain

1.a Recovery in productive investment since the pandemic



1.b Private and public investment



SOURCE: INE.

a Investment excluding housing.

b Up to 2024 Q3.



considerable heterogeneity by type of productive capital and sector of activity (see Chart 2.a). By type of capital, firms expect a slight decline in investment in land and buildings, negligible growth in investment in transport equipment, but more buoyant investment in machinery and equipment (excluding transport equipment) and intangible assets. By sector, the most optimistic investment outlook for the next 12 months is reported in industry and energy, followed by non-market services (including education and health care). By contrast, the construction sector barely expects investment to increase. Expectations for travel services⁸ are somewhat more upbeat than for business services,⁹ where investment is also expected to slow following the past year's strong performance.

Beyond cross-sectoral differences, the information from the EBAE can be used to explore the heterogeneity in investment decisions of firms operating in the same sector, and their relationship

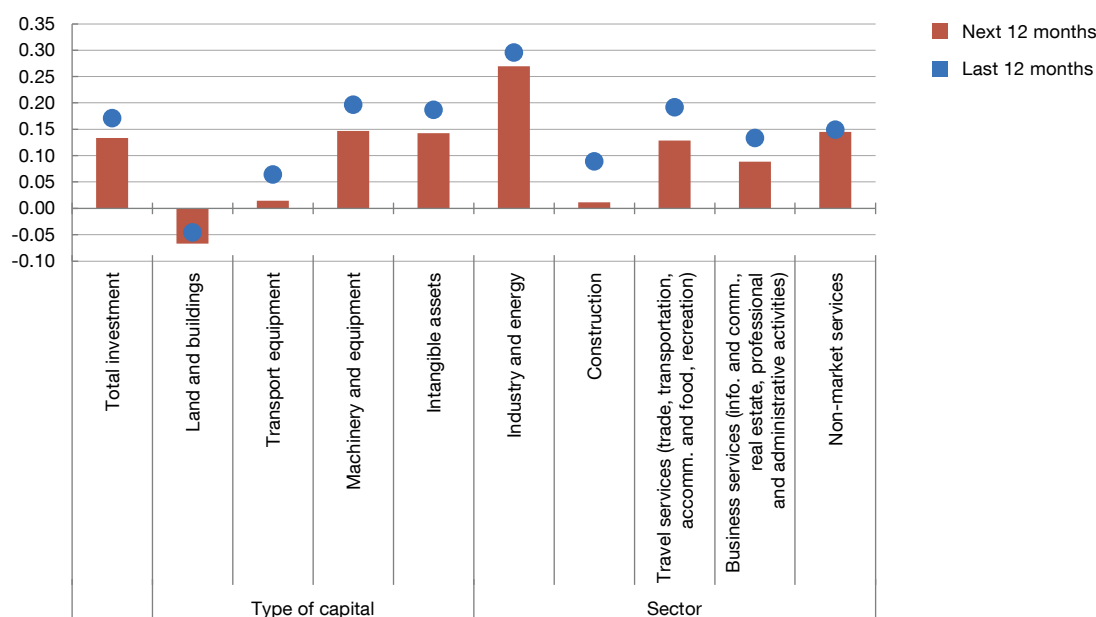
⁸ Trade, transportation, accommodation and food services and recreation.

⁹ Information and communication, real estate, professional and administrative activities.

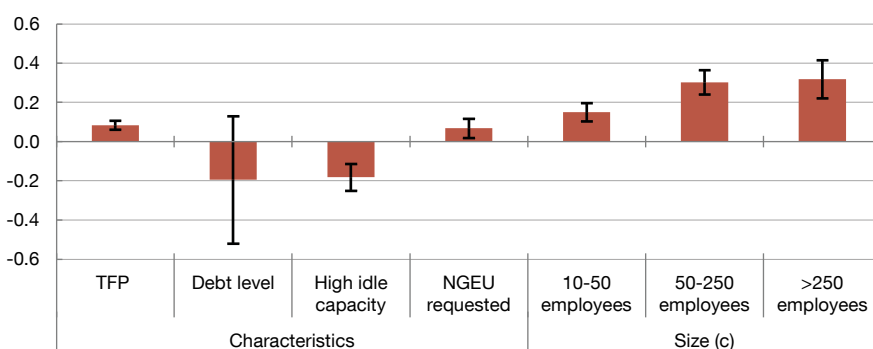
Chart 2

Changes in firms' investment

2.a Changes in firms' investment by type of capital and sector (a)



2.b Relationship between firms' characteristics and projected investment in the next 12 months (b)



SOURCE: EBAE (Banco de España).

- a Question: "How do you think your firm's investment has performed/will perform in the last/next 12 months?". Index constructed by assigning the following values to qualitative responses: significant increase = 2, slight increase = 1, unchanged = 0, slight decrease = -1, significant decrease = -2.
- b Question: "How do you think your firm's investment will perform in the next 12 months?". The coefficients of a regression whose dependent variable is an index constructed by assigning the following values to qualitative responses: significant increase = 2, slight increase = 1, unchanged = 0, slight decrease = -1, significant decrease = -2. The independent variables are as follows: "TFP" (total factor productivity) measured using the Wooldridge approach, at the two-digit level of sectoral disaggregation based on NACE Rev.2 (see Rovigatti and Mollisi, 2018; "Debt level" is defined as net borrowing/net assets; "High idle capacity" is in response to the question "Considering the current and expected level of demand, how would you describe your firm's productive capacity based on its current resources?", taking the value of 1 for the response "It is more than enough to meet demand, the firm has high idle capacity", and "NGEU requested" is a binary variable that takes the value of 1 if the firm has applied for NGEU funds. The first two variables have been standardised. Additional controls are age, sector at the one-digit level and the capital-to-value added ratio. The error bars represent 90% confidence intervals.
- c The omitted size category is < 10 employees. The coefficients represent the increase in investment with respect to the omitted category.



with other firm characteristics. Specifically, a regression is conducted in which the dependent variable is the change in expected investment reported in the survey,¹⁰ while the explanatory

10 The results of a similar exercise using investment in the last 12 months as the dependent variable are similar for all the firm characteristics analysed.

variables are various firm-level indicators, such as productivity,¹¹ the number of employees, debt level (these three indicators are from the CBI), idle capacity¹², and a dummy variable that shows if the firm has participated in NGEU projects (both these indicators are from the survey), and a set of variables that factor in the sector of activity, firms' age and how capital-intensive they are.

The survey results show that the more productive firms expect greater growth in investment in the coming 12 months (see Chart 2.b). As could be expected, firms with more idle capacity reported weaker expected investment.¹³ In addition, there is a negative (but not statistically significant) correlation between firms' debt levels and their investment expectations for the coming year, while expected investment is higher among firms that have applied for NGEU funds. In terms of firm size, investment is projected to increase the larger the firm, although no major differences are observed among the largest firms (more than 250 employees) and medium-sized firms (50-250 employees). By type of capital, the results are very similar, although the positive correlation between investment and size is stronger for investment in machinery and equipment than for investment in real estate.

Obstacles to investment

For a better understanding of the factors that may be limiting business investment, the survey module included a question about various investment obstacles.¹⁴ Chart 3.a shows the percentage of firms reporting that a specific obstacle would negatively or very negatively affect their decisions to invest in the coming 12 months. As indicated by firms, the main obstacle to investment is uncertainty over economic policy (negatively impacting 40% of firms), followed by outsourcing of production processes¹⁵ and business regulation (affecting around one-third of firms). At the other end of the scale, less than 20% of firms reported the profitability of available projects, difficulties in accessing financing or labour shortages¹⁶ as constraints on their investment decisions.

By size, firms' responses show some heterogeneity. In general, firms with more than 50 employees report a lesser impact of all the obstacles analysed. Regarding labour shortages,

11 Productivity is measured as total factor productivity using the Wooldridge approach, at the two-digit level of sectoral disaggregation based on NACE Rev. 2 (see Rovigatti and Mollisi, 2018).

12 "High idle capacity" is in response to the question "Considering the current and expected level of demand, how would you describe your firm's productive capacity based on its current resources?", taking the value of 1 for the response "It is more than enough to meet demand, the firm has high idle capacity".

13 The latest survey of the European Investment Bank (European Investment Bank, 2023) shows that 35% of Spanish firms used their investments to increase their productive capacity in the previous year, the second-highest rate in the European Union. Conversely, they invested less in new products and services.

14 For an analysis of the obstacles to investment before the pandemic from a European perspective, see Alves, Dejuán and Maurin (2019).

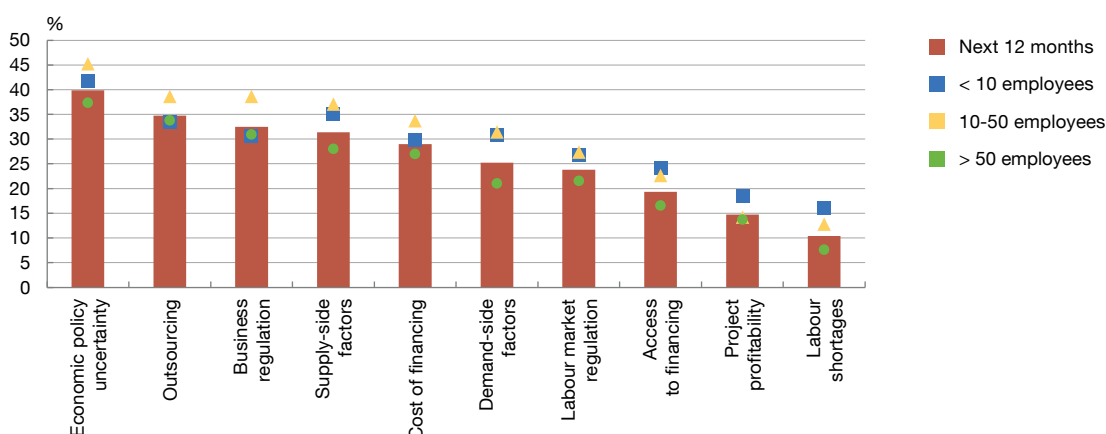
15 This could be an investment obstacle for firms that outsource part of their production process. However, investing by the subcontractors would have no negative effect on aggregate investment.

16 The standard EBAE questionnaire includes a question about labour shortages as a factor limiting business activity. This factor is perceived as negative or very negative by 41.1% of respondent firms in the same edition as that in which this module was included. By contrast, only 10% of firms consider labour shortages a significant impediment to investment. First, this could be explained by the fact that firms may perceive labour shortages as a short-term problem currently affecting their activity, but one that will not persist in the medium term, therefore not affecting their investment decisions. Second, firms may perceive labour supplementing plant and equipment to be less scarce in relative terms.

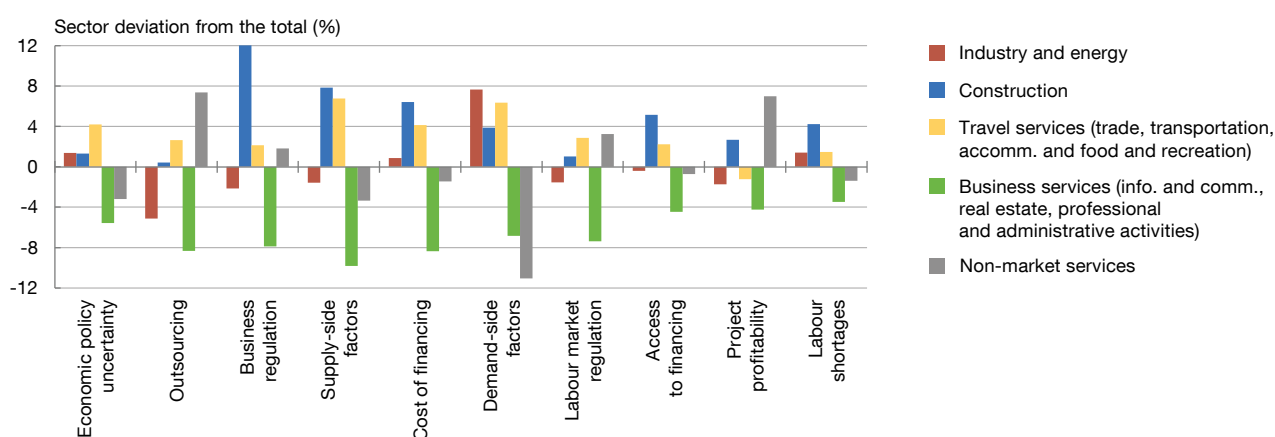
Chart 3

Factors affecting firms' investment decisions

3.a Factors limiting investment (a)



3.b Factors limiting investment, by sector (b)



SOURCE: EBAE (Banco de España).

- a Question: "How have the following factors affected your firm's investment decisions in the last 12 months?". The chart shows the percentage of firms reporting a negative or very negative impact of each of the factors on their investment decisions.
- b The deviation in the percentage of firms reporting a negative or very negative impact in each sector with respect to the average for all firms.



profitability of available projects and access to financing, the most affected firms are those with fewer than 10 employees. However, firms with 10 to 50 employees are the hardest hit by business regulation, economic policy uncertainty, cost of financing and outsourcing. By sector (see Chart 3.b), business services is the sector with the lowest impact across all the obstacles, except for those related to demand-side factors,¹⁷ where non-market services are the least affected. In the construction sector, business regulation, supply-side factors¹⁸ (such as the supply of materials), financing and labour shortages have a significant negative impact. Industry and

17 Demand-side factors refer to investment obstacles stemming from weaknesses or other problems in the demand for the products of respondent firms.

18 Supply-side factors include supply chain bottlenecks.

energy are particularly impacted by demand-side factors, while for the travel services sector, uncertainty over economic policy proves a greater constraint than for the overall sample of firms. Lastly, non-market services are the most impacted by the low profitability of available projects and outsourcing.

To further analyse the relationship between firms' characteristics and the probable impact of each of the obstacles considered, a logit regression is conducted, where the dependent variable takes the value of 1 if the firm reports a negative or very negative impact for each obstacle, and where the firm characteristics mentioned in the previous section are included as explanatory variables. The results show that a higher indebtedness ratio is associated with a greater impact of all obstacles, especially those relating to the cost of and access to financing. The most productive firms tend to be less affected by labour shortages, supply-side factors and outsourcing of production processes as factors limiting investment.

Analysis of NGEU-funded investments

Three additional questions were included in the specific module of the EBAE to ascertain: the extent to which firms are participating in calls for NGEU-funded investment projects, the purpose of these investments and their degree of additivity (namely, whether they are investments which would not have been made without these funds). Based on the survey results, 21.1% of firms have applied for or will shortly apply for these European funds – a percentage which is slightly lower among small firms than large firms. Applications made by 49.6% of the subgroup of 21.1% of firms (equivalent to 10.5% of the total sample) have already been approved and a further 13.5% (almost 3% of the total) are pending approval. By sector, industrial and energy firms have been particularly active in this area, with 30.6% having submitted applications, compared with lower percentages in sectors such as professional, scientific and technical activities (14.9%) or real estate (9.9%) (see Chart 4.a).

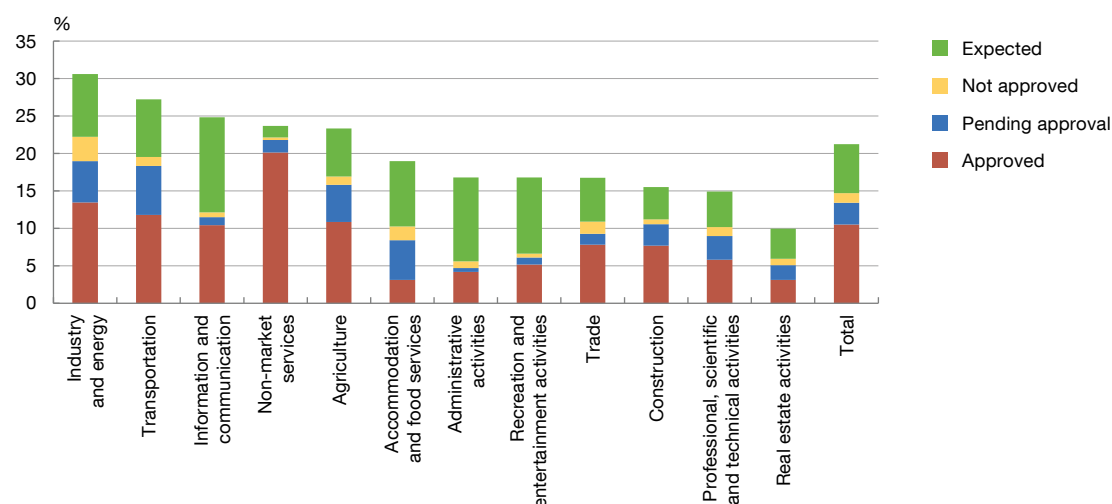
Since the NGEU programme focuses on promoting the green and digital transitions, firms that have made or will make investments with these funds were asked what their main purpose will be. A total of 40% of the firms requesting NGEU funds mainly use them for digital investments (defined as projects aimed at digitalising/automating production processes or other technological improvements), notably in sectors more closely linked to travel services, particularly the wholesale and retail trade and non-market services (see Chart 4.b). For 21.3% of the firms requesting funds,¹⁹ green investments (decarbonisation, energy saving or climate change-related projects) were the main focus; these firms are concentrated in the industry and transportation sectors, whereas they represent a minority in the other sectors. Meanwhile, 16% of firms submitting applications (which are concentrated in non-market services and information and communication services) indicated that they mainly invested NGEU funds in R+D+I. Lastly,

19 According to the [Recovery, Transformation and Resilience Plan](#), which sets out the main investments under the NGEU programme in Spain, 28.2% of the investment is earmarked for boosting the digital transition, 39.7% for ecological transformation and 7% for R+D+I.

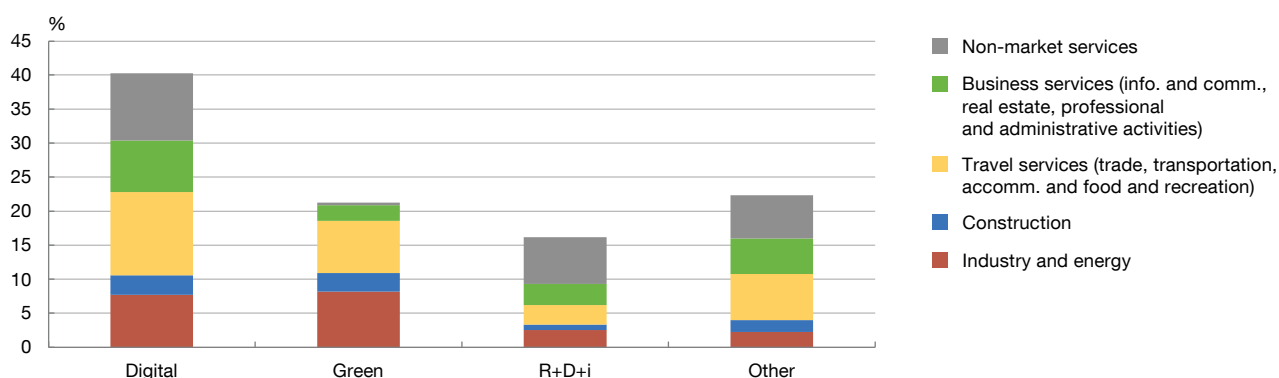
Chart 4

NGEU-funded business investments

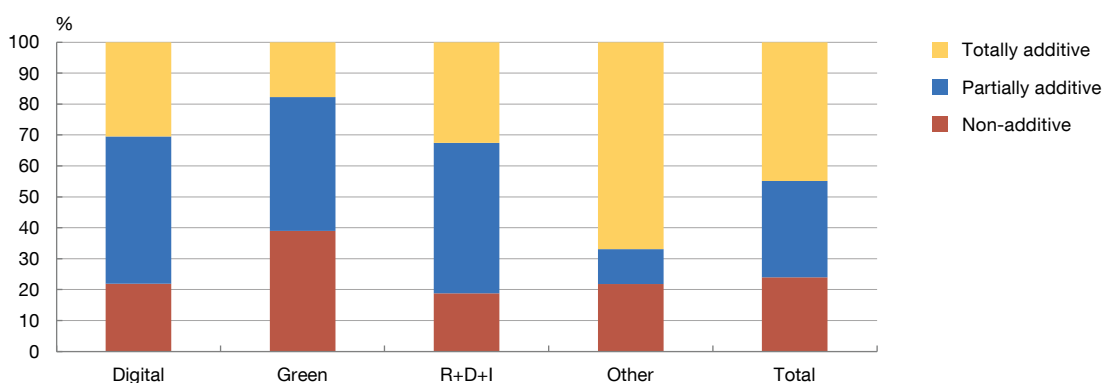
4.a Firms' participation in NGEU projects, by sector (a)



4.b Main purpose of NGEU-funded business investments (b)



4.c Additivity of NGEU funds, by main purpose of business investment (c)



SOURCE: EBAE (Banco de España).

- a "Has your firm requested any funding or has it participated in any tender procedures relating to the Recovery and Resilience Facility (NGEU funds) since the programme was launched?"
- b "If your firm has or is intending to make any NGEU-related investments, please indicate the main purpose of these investments". Green: "Decarbonisation, energy saving or climate change-related projects". Digital: "Projects aimed at digitalising/automating production processes or other technological improvements".
- c "If your firm has or is intending to make any NGEU-related investments, would it have made these investments without these European funds?". Non-additive: "Yes, these investments would have been made with or without European funds." Partially additive: "Only some of the investments would have been made." Totally additive: "No, these investments would not have been made without European funds."



22% of firms mention that these investments are mainly used for “other purposes”, with a similar breakdown by sector.²⁰

When assessing the economic impact of the NGEU programme, it is essential to examine the extent to which the investments of firms that have received support are indeed “new” or “additive”, i.e. whether they have only been made thanks to these funds. According to the EBAE, 45% of firms that have made or will make investments with NGEU funding would not have done so without these funds (i.e. they are completely additive investments), 31% would only have made part of the investment (partially additive) and 24% would have made the investment in any case (non-additive). However, there are variations by type of investment. Green investments show a lower degree of additivity: only 18% of firms report that all these investments were possible thanks to the funds, whereas 39% would have made them even without this support (see Chart 4.c). This lower additivity of green investments, compared with that in the digital, R+D+I and “other purposes” areas (which stand at 31%, 33% and 67%,²¹ respectively) suggest there is more deadweight loss in aid for the energy transition, which may be at least partly related to the high returns on these investments against a backdrop of lower green energy costs and higher fossil fuel prices.²²

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20 These “other purposes” may include, for example, aid for internationalisation, for the purchase or replacement of transport equipment or machinery and for training.

21 The sectors that contribute most to explaining this high percentage of additivity in “other purposes” are administrative activities and non-market services.

22 See Banco de España (2023).

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